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CLEAN WATER ACT OVERSIGHT

HEARING

BEFORE THE

SUBCOMMITTEE ON ENVIRONMENTAL PROTECTION

OF THE

COMMITTEE ON
ENVIRONMENT AND PUBLIC WORKS
UNITED STATES SENATE

ONE HUNDRED FIRST CONGRESS

FIRST SESSION

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CLEAN WATER ACT OVERSIGHT

FRIDAY, JUNE 16, 1989

U.S. SENATE,
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS,
SUBCOMMITTEE ON ENVIRONMENTAL PROTECTION,
Washington, DC.

The subcommittee met, pursuant to notice, at 10:06 a.m., in room 406, Dirksen Senate Office Building, Hon. Max Baucus (chairman of the subcommittee) presiding.

Present: Senators Baucus, Lieberman, Chafee, Warner, and Jeffords.

OPENING STATEMENT OF HON. MAX BAUCUS, U.S. SENATOR FROM THE STATE OF MONTANA

Senator BAUCUS. Good morning, ladies and gentlemen.

The first major action of the last Congress was the enactment of comprehensive amendments to the Clean Water Act.

As many of those here today remember, passage of these amendments was a long and difficult process. President Reagan pocket vetoed the legislation late in 1986, and early in 1987 Congress again passed the amendments and overrode another veto.

Today's hearing comes at the midpoint in the five-year authorization period for the Clean Water Act. This is an opportunity for us to take stock of accomplishments and to consider where corrections and improvements may be needed.

I want to make three general comments, though, before we begin. First, we will be focusing on three key issues in implementation of the Clean Water Act amendments: new initiative to control toxic pollution; development of programs for reducing nonpoint source of pollution, and start-up of State revolving loan funds to assist in financing of pollution control facilities.

There are, however, a range of additional issues related to clean water programs, including disposal of sewage sludge, control of storm water discharges, implementation of new enforcement authorities, and implementation of improvements to water discharge permit regulations.

We have asked that witnesses address the full range of issues in more detailed written testimony. In addition, we have requested written testimony from other groups and organizations, and this testimony will be included in the hearing record.

Second, as I am certain that many of our witnesses will point out, the general problem of funding runs across almost all aspects of the Clean Water Program. The most serious problem is the shortfall in appropriations for the construction grant and loan pro-

grams. This shortfall is delaying waste water treatment assistance for municipalities throughout the country.

Small communities and rural areas, such as my home State of Montana, are especially hard hit by the lack of Federal assistance.

The Reagan administration made repeated attempts to retreat on our commitment to assisting communities in meeting clean water goals, and the current Bush proposal is to cut this funding in half.

Congress has rejected these proposals, and it is essential that we follow through on our commitment to funding provided in recent amendments.

Lack of funding is becoming a major obstacle to implementation of the new nonpoint pollution control programs now being developed by States. Congress authorized a total of $400 million over four years to assist in implementing the program, and this funding is needed now more than ever.

In addition, States are struggling to carry out the many new initiatives of the Act while total grant assistance is declining.

Third, this hearing is both a look back at the progress of the amendments we enacted over two years ago, and a look forward to the next reauthorization effort, which will start in 1991.

While I do not expect the committee to consider comprehensive amendments to the Clean Water Act in this Congress, we will be considering water quality legislation in several specific areas.

In response to the wreck of the Exxon Valdez, a number of proposals have been introduced to amend the oil spill response and penalty authorities of Section 311 of the Act. This subcommittee will hold hearings on these and related proposals later this summer.

In addition, Senators Lautenberg and Mitchell had developed legislation to expand and improve programs for protection of marine and coastal waters, including amendments to several provisions of the Clean Water Act.

I expect this subcommittee and Senator Lautenberg's subcommittee will be holding joint hearings on these bills this summer.

In closing, I want to commend Senators Chafee and Mitchell for their leadership in developing the 1987 amendments to the Clean Water Act. Senator Chafee chaired this subcommittee in the 99th Congress, and Senator Mitchell served as the ranking minority member of the subcommittee in the 99th Congress and, as Chairman of the subcommittee in the last Congress, led the fight to override the veto.

The high quality of this legislation is due in large part to their efforts—Senator Chafee and Senator Mitchell. I look forward to hearing from all our witnesses today.

We will start with Ms. Hanmer from the environmental Protection Agency. Why don't you proceed?

Before I begin, I think I will turn to the stalwart of the committee whom I have praised so highly, Senator Chafee.

OPENING STATEMENT OF HON. JOHN H. CHAFEE, U.S. SENATOR FROM THE STATE OF RHODE ISLAND

Senator CHAFEE. Thank you for holding these hearings. Secondly, thank you for those kind remarks. We have got quite a group of witnesses, so I will just put my statement in the record.

One thing I do think we want to look at, Mr. Chairman, and I touch on this in my statement, and perhaps some of the witnesses, Ms. Hanmer can comment too—as you mention, Mr. Chairman, we are short on resources.

Even if we are able to scramble back from what the Bush Administration recommended—$1.2 billion last year, and we got $1.9 short, obviously, of the $2.4 billion—but nonetheless, it may well be that is where we will be again this year.

I think we ought to look at some fees that we might levy. I would be interested to hear your thoughts on that, whether fees based on the volume of the discharges, fees for the permits, or mandatory monetary penalties for exceeding the permit limitations—there are a variety of things that we might do, and shift some of the burden.

For example, the discharges—making them do some of the in stream monitoring. I would be curious if you had any thoughts on those.

Thank you, Mr. Chairman.

[Senator Chafee's statement follows:]

OPENING STATEMENT OF HON. JOHN H. CHAFEE, U.S. SENATOR FROM THE STATE OF RHODE ISLAND

I want to thank you, Mr. Chairman, for holding these hearings. These are our first hearings on the Clean Water Act since it was reauthorized in 1987. The testimony today will show that there are several important issues which need our attention.

The 1987 Water Quality Act contained some important initiatives to cleanup the toxic pollution of our Nation's waters. Just this week, EPA released the survey of toxic hotspots showing that 595 rivers, lakes or streams are being damaged by toxic pollution from industrial or municipal point source discharges. And that's just the short list of priority problems. EPA also announced that a total 17,365 water segments are not meeting water quality standards over the whole range of pollutants including toxic pollution from the non-point sources.

In reviewing EPA's efforts to deal with these toxics problems, we may decide that more needs to be done. In particular, I am looking at five steps that EPA could take on toxics that would strengthen their program.

First, they may need to expand the list of priority pollutants. There appear to be large discharges of several toxic substances that are not on the list of 126 toxic pollutants that are currently regulated.

Second, the number of industries subject to BAT effluent guidelines could be expanded to reflect the true scope of our toxic problem. EPA is proposing the list more industrial categories for best technology standards, but their list seems to be the bare minimum.

Third, we need to assure compliance with permit and pretreatment requirements. Just last month GAO reported that 41% of the indirect discharges are in violation of pretreatment requirements. And 37% of the toxics reaching surface waters come from the POTWs which handle these indirect discharges.

Fourth, EPA must assure that states establish numerical standards for all of the 126 priority pollutants. Other measures of toxicity to deal with the unlisted pollutants may also be helpful, but we need numerical measures for the basic list so that we can be sure that our waters are not overloaded with these pollutants.

And fifth, we need to consider going beyond control plans for just the list of 595 toxic hotspots caused by point sources to develop cleanup measures for all 18,000 water segments that are not meeting standards. Under current regulations, states will only be developing responses to hotspots where a point source discharge is the

cause. That's the short list of 595 sites. But the longer list includes thousands of sites every bit as impaired by toxic pollution from non-point sources.

The second issue which is likely to emerge from this hearing is the resource problem. We have not paid for the 1987 Water Quality Act. We keep asking EPA, the states and the local wastewater agencies to do more with less. It is clear that many of the goals we incorporated in this legislation are being defeated by the budget deficit—not by OMB or by polluters or by the limits of technology—but by the lack of resources to carry out programs.

Mr. Chairman, I think we may need to look at additional legislation in this area. A midcourse downpayment, if you will. It may be that this Committee can identify some solutions. Again, I would suggest five possibilities.

First, fees for permits including fees based on the volume of conventional and toxic discharges. Fees that are volumetric can raise revenue, and may also discourage pollution.

Second, we should look at mandatory monetary penalties for exceedances of permit limitations, again based on the size of the exceedance.

Third, we may require each discharger to secure an annual independent audit to determine whether they are in compliance with the requirements of the Act. This would help with expenditures on the enforcement side of the program.

Fourth, we may shift some of the burden to the discharger by requiring them to perform in-stream monitoring and other tasks to assure that water quality objectives are being met.

And fifth, we may authorize the states to charge the regulated community for some of the services they provide, like the waste load allocation studies that are necessary to determine permit limits.

Each of these steps would help the states carry out the many duties which they have been assigned under the 1987 amendments.

Mr. Chairman, before concluding I just want to make a short comment about the sludge rules. This problem has been around since 1977. It now appears that the technical rules will not be final until 1991. Even that date will probably slip. There is just no excuse for these continual delays. We may be reaching the point where the Congress will have to legislate numerical sludge standards, perhaps in an amendment to RCRA.

Mr. Chairman, I want to again thank you for scheduling this hearing. This is an important program which needs our attention. I look forward to hearing from our witnesses on the toxics problem, the resource problem and the other issues raised by the 1987 amendments.

Senator BAUCUS. Thank you, Senator.

Senator CHAFEE. And thank you for the kind remarks.

Senator BAUCUS. Senator Lieberman?

OPENING STATEMENT OF HON. JOSEPH I. LIEBERMAN, U.S. SENATOR FROM THE STATE OF CONNECTICUT

Senator LIEBERMAN. Thank you, Mr. Chairman.

I have a statement which I would like to enter into the record, and just draw briefly from it.

As a new member of the committee, I thank you for convening this hearing to review the Clean Water Act, and join in your congratulations and tribute to Senator Mitchell and Senator Chafee for their leadership in this effort.

It does seem to me that the Clean Water Act stands alongside the Clean Air Act and the Wilderness Act as landmark legislation which really represents the best and most visionary efforts of Congress over the years to protect our natural environment.

The Clean Water Act and the Water Quality Amendments of 1987 express a commitment by the Federal Government to ensure that all of our people can count on clean and healthy water. And they are also a contract between the Federal Government and the States that detail our mutual responsibilities toward realizing that objective, which was a simple one: to provide fishable and swimmable waters.

I know that our purpose here today under your leadership, Mr. Chairman, is to measure our progress toward that objective.

The New York Times reported recently that EPA's data show that nearly 20,000 separate water bodies in 49 States and 6 territories are polluted. And as Ms. Hanmer, who we will hear from soon, said, unfortunately we are still going downhill.

We are going to hear testimony today also about the revolving loan fund program, designed to help States meet the bill for upgrading their sewage treatment plants to secondary treatment as required by law.

Obviously there is a serious money problem there. We promised the State seed money so that they could get those revolving loan funds started, but what we gave them were letters of credit against which they could not leverage.

And then we took away the Governors' discretionary funds for other projects by curtailing administrative expenditures, and by using money designated for sewage treatment plants for our nonpoint program.

I hope we can find some creative way to restore some life and substance to the construction grant program, and if possible, expand it so it pays some attention to the crushing problems of combined sewer overflows.

The same holds true of the nonpoint program itself. Congress recognized the increasing importance of nonpoint pollutants two years ago, but then didn't really fund the program.

If we are serious about water quality, then we really have to abide by the laws adopted, provide the staff, the education, the enforcement, and the program funding.

Having said all that, may I also say, as a newcomer and observer and someone who comes from the State level that there have been some extraordinarily positive results of the Water Quality amendments.

One that is close to home is the National Estuaries Program, which has been of tremendous benefit to the States of Connecticut and New York in helping us with our Long Island Sound study.

The focus of the Act on the national value of such estuaries has really helped to widen our awareness of water quality issues.

Mr. Chairman, I hope that under your leadership we will be able to renew our efforts toward that vision and deepen our understanding that all the waters of our country are interrelated, and that our rivers and streams are really like veins that connect every community in the country.

With renewed attention to enforcement of the good laws we have now, funding for the good programs already approved and in place, and adequate staffing and rigorous permitting, we can ensure that our veins are carrying life rather than threatening it.

Thank you, Mr. Chairman.

[Senator Lieberman's statement follows:]

OPENING STATEMENT OF HON. JOSEPH I. LIEBERMAN, U.S. SENATOR FROM THE STATE OF CONNECTICUT

The Clean Water Act stands with the Clean Air Act and the Wilderness Act as landmark legislation, representing the best and most visionary efforts of Congress to protect our natural environment.

The Clean Water Act and the Water Quality Ammendments of 1987 express a committment by the Federal Government to ensure all our citizens can count on clean and healthy water. And they are also a contract—between the Federal Government and the States, detailing their mutual responsibilities toward that objective.

The objective was simple: fishable and swimable waters. Our purpose here today is to measure our progress toward that objective. Has the Federal Government met its committment and kept its promises? Have the States lived up to their part of the contract? Most important: Are our waters healthy? Can our families swim in them? Can we eat the fish we catch in them?

The New York Times reports that EPA's data show nearly 20,000 separate waterbodies in 49 States and 6 territories are polluted. EPA also announced this week that 10 percent of our Nation's waters are polluted by toxics, sewage, metals, and runoff. Our comprehensive program for controlling toxic pollutant discharge into our waters cannot be working very well if this is the case.

We'll hear testimony today about the State revolving loan fund program, designed to help States meet the bill for upgrading their sewage treatment plants to secondary treatment as required by law. We promised States seed money so they could get these revolving loan funds started but what we gave them were letters of credit against which they could not leverage.

And then we took away the governor's discretionary fund for other projects, by curtailing administrative expenditures, and by using money designated for sewage treatment plants for our nonpoint program.

If we know what the problem is, let's fund the clean up and do everything possible to help the States comply. Let's not create a program and then cripple it before it even has a chance to get going.

Not only should we restore the Construction Grants Program, we should expand it to include combined sewer overflows. The sewage treatment plant and the sewers that run to and from it are part of one system; we should treat them as such and stop this piecemeal and fragmented approach to improved water quality.

The same holds true for the nonpoint program. Congress recognized the increasing importance of nonpoint pollutants two years ago, then didn't fund the program. EPA now says the quality of the States reports on their plans to deal with nonpoint pollution is generally poor. Perhaps its because the states see more of the same coming at them from the Federal Govervent. They may ask themselves: Why write an elaborate plan you'll never be able to fund? Why target polluters you won't be able to catch? Regulations you won't be able to enforce? Programs you won't be able to fund?

Are we serious about water quality or not? If we are we will abide by the law, provide the staff, the education, the enforcement, and the program funding.

That said, there have been some positive results from the Water Quality Ammendments. The National Estuaries Program, for example, has benefited my home State of Connecticut and the State of New York immeasurably by its Long Island Sound Study. And the focus of the act on the national value of such estuaries has helped to widen our awareness of water quality issues. Certainly, in Connecticut we ve come to realize how dependent we are on our neighbors in New York and in Rhode Island and Massachusetts for the quality of our rivers and streams and our coastline.

I hope we will renew our efforts and our vision; and deepen our understanding: all water are interrelated; our rivers and streams are like veins connecting every community in our country. With renewed attention to enforcement of the good laws we have now, funding of the good programs already approved and in place, adequate staffing and rigorous permitting, we can ensure that our veins carry life rather than threaten it; that our waters cleanse and nourish us, that they remain sources of pleasure and beauty and cause us to remember through them our connections to and our responsibilities to our neighbors and our country.

Senator BAUCUS. Thank you very much, Senator Lieberman. You have consistently been a valuable addition to this committee, and we appreciate it very much.

Senator LIEBERMAN. Thank you.

Senator BAUCUS. The statement of the Majority Leader, Senator Mitchell, and a statement of Senator Jeffords will be entered at this point in the record.

[The statements referred to follow:]

STATEMENT OF HON. GEORGE J. MITCHELL, U.S. SENATOR FROM THE STATE OF MAINE

Good morning ladies and gentlemen.

For almost twenty years, the Clean Water Act has guided the efforts of local, State and Federal government in the protection of the quality of our rivers, lakes, and streams. Many Americans can remember when some of our rivers were little more than stinking, open sewers. The programs authorized by the Clean Water Act have succeeded in cleaning up the most obvious pollution problems, but much more remains to be done.

During our hearings on reauthorization of the Clean Water Act in the 99th and 100th Congresses, were heard of the significant pollution problems caused by nonpoint sources of pollution, the sericusness of toxic contamination of our waters, and the huge need for construction of sewage treatment facilities.

We responded to these problems with passage of comprehensive amendments to the Clean Water Act in February of 1987.

Members of this Committee, and the Public Works Committee in the House, worked in a bipartisan effort to develop amendments to the Act. Unfortunately, the Reagan Administration opposed the legislation and the President pocket vetoed the bill in late 1986 and vetoed the bill directly in January of 1987.

While the Congress overrode the President's veto, we still faced the continued opposition of the Administration to the funding needed to carry out key programs in the Act. President Bush has continued the Reagan policy of drastic cutbacks in assistance to communities needing assistance to construct sewage treatment facilities. And, the Administration has opposed all funding for new efforts to control nonpoint sources of pollution.

This hearing is an opportunity for us to review our progress in implementing water quality programs. It is a chance for interested groups to address the problems posed by limited program funds and to comment on other aspects of program implementation. And it is a chance for the Administration to reassess the need for an aggressive response to water pollution and embark on a more constructive approach to solving our water quality problems.

Finally, Mr. Chairman, since the passage of the Clean Water Act amendments over two years ago, I have become increasingly concerned about the seriousness of pollution in our coastal and marine waters. Last summer, beaches in the northeast were closed as a result of medical waste and other pollution. There is a large "dead zone" in the Gulf of Mexico, and harbors of the west coast have toxic contaminants in sediment.

On Wednesday of this week, I introduced legislation to amend the Clean Water Act and other statutes to expand and strengthen programs for protection of coastal waters. Key provisions of the bill would expand programs for the protection of bays and estuaries, strengthen marine water quality standards for toxic and other water pollutants, and establish new standards for contaminants in marine sediments.

I look forward to working with you, Mr. Chairman, and with other interested membes of the Committee, in developing legislation to protect marine and coastal waters and the continued oversight and evaluation of our broader clean water program.

Thank you.

STATEMENT OF JAMES M. JEFFORDS, U.S. SENATOR FROM THE STATE OF VERMONT

Mr. Chairman, thank you for convening this oversight hearing. As we are at the mid-point of the 5-year authorization of the Water Quality Act, I think it is important that we offer interested parties an opportunity to express their views on the effectiveness of this crucial law that seeks to eliminate the flow of pollution entering our national waters.

The Water Quality Act was an ambitious bill that came to be enacted only after much contentious debate. Many of the current Members of this Committee, with the assistance of several key staff members present today, are to be commended for their contributions to the legislation now before us.

This is not to say things have gone exactly as planned. In reviewing the history of this law, it seems clear that there have been difficulties in its implementation. The Environmental Protection Agency has not met many of the statutory deadlines of the Act—Others were satisfied only after protracted lawsuits. Congress must shoulder some of the blame. Certainly the 1986 deadline for effluent guidelines for pesti-

cide manufacturers was a bit ambitious. On the other hand, even today these rules have yet to be proposed.

There has been a constant struggle for funding of the programs mandated by the Act. Sewage construction grant funding is perhaps the most visible program over which budget debates have been staged. But also, the $400 million authorized for Section 319 nonpoint sources of pollution has never been funded. Of course, there are other mechanisms by which money can be made available by the states to confront nonpoint source pollution problems, but often this becomes a case of robbing Peter to pay Paul.

There is increasing testimony that a manpower shortage within the E.P.A. has contributed to rule-making delays and enforcement deficiencies. This problem is not unique within the Water Program—we see evidence of similar difficulties in other programs and within other agencies. I do not I purport to have the solution to this budget problem to offer to my colleagues today, but I am interested in hearing the views of our witnesses concerning this issue, so that changes may be contemplated with the benefit of constructive comments.

I do have some real concerns with the implementation of the Water Quality Act that I hope can be clarified today. I'm troubled by indications that several significant sources of toxic pollution continue to operate without federal regulations. Further, it seems that E.P.A.'s own 1986 "Domestic Sewage Study" found that existing regulations are inadequate, in many cases, to fulfill the Act's intention of eliminating toxic releases.

The so-called "toxic hot spots," areas where toxic discharges continue to be a problem after initial control devices have been installed, should constitute a priority for the Agency to tackle as expeditiously as possible. I am anxious to hear testimony regarding this issue.

In my state of Vermont, however, it is the nonpoint sources of pollution that seem to be the most significant contributors to water pollution problems. To their credit, Vermont officials have submitted, and the Agency has approved, assessments and management plans for water basins threatened by nonpoint sources of pollution.

In particular, the states of Vermont and New York have joined forces to submit an ambitious plan to address the factors contributing to pollution in Lake Champlain. The significance of the Lake Champlain basin was recently underscored by its designation as an official Biosphere Reserve by the United Nations Educational, Scientific and Cultural Organization (UNESCO). Vermont is prepared to move forward with its plans, and I am hopeful that the E.P.A. will see fit to offer adequate assistance to aid in this endeavor.

I understand that funding of nonpoint programs has not lived up to the ideals of the Act. Today, I hope to gain a better understanding of the various funding mechanisms currently available for states to develop management plans. I am also concerned about the quality of the plans that have been developed, whether the Agency feels these plans emphasize proper actions, and whether the delay in submission of these plans by several states is a function of inadequate funding, insufficient guidance, misplaced emphasis or other factors.

Of course, the Construction Grant program is one which every Senator is familiar with because we hear so much about it from state officials back home. And rightfully so. Sewage treatment facilities are tremendously expensive to construct and operate, and clearly federal assistance is warranted. It is unfortunate that we do not have the estimated $83 billion necessary to complete the job of installing treatment facilities in communities throughout the nation. Hopefully, as the budget process continues, we can at least fund this program to the extent that was contemplated by the Act.

I am deeply concerned about the recently proposed regulations for sewage sludge. I do not profess to be an expert on the subject, nor have I poured over the text of the complex rules, but it seems that the rules, as proposed, establish much stricter rules for sludge destined for reuse (such as land application) compared to those for sludge destined for landfull disposal. Maybe the regulations should be restructured to put all sludge regulations on par.

A lower standard for landfilled sludge could encourage an increase in this method of disposal. This seems contrary to the EPA's desire to encourage treatment of sewage waste to the point where beneficial uses are possible.

We currently face a landfill capacity problem. We needn't contribute to this problem by encouraging disposal of sewage sludge that may or may not be safe for land application.

Mr. Chairman, thank you for the opportunity to contribute to the process by which we seek to protect the integrity of our national waterways. I look forward to hearing testimony from the distinguished panelists present.

Senator BAUCUS. Okay, Ms. Hanmer.

STATEMENT OF REBECCA HANMER, ACTING ASSISTANT ADMINISTRATOR FOR WATER, ENVIRONMENTAL PROTECTION AGENCY, ACCOMPANIED BY JIM ELDER, OFFICE OF WATER ENFORCEMENT AND PERMITS; MARTHA PROTHRO, OFFICE OF WATER REGULATION AND STANDARDS; AND MIKE QUIGLEY, OFFICE OF MUNICIPAL POLLUTION CONTROL

Ms. HANMER. Thank you, Mr. Chairman.

I share your enthusiasm about the Water Quality Act of 1987. It has been a very good set of amendments to administer, even though we have not been able to meet some of the deadlines. But it has been a very good law, in our judgment, and we are doing very good things with it.

I have a statement for the record that I would like to provide, and just summarize more briefly this statement to focus on the specific issues you gave priority to: State revolving loan funds, control of toxic discharges, and also the nonpoint source provisions, and a little bit on the State funding problem, if that is okay.

Senator BAUCUS. Yes.

Ms. HANMER. I also have with me Jim Elder, Martha Prothro and Mike Quigley. Jim is the head of the Office of Water Enforcement and Permits. Martha Prothro is head of the Office of Water Regulations and Standards, and Mike Quigley is the head of the Office of Municipal Pollution Control. Among them, they are the major office directors who share responsibility for this law.

From EPA's perspective, the important initiatives in the Water Quality Act are based on three fundamental directions. One is that we are shifting financial responsibility for waste water treatment systems away from Federal grant programs and towards State and local funding sources.

We believe that this is a shift that needs to take place. It also feels sometimes like going over Niagara Falls in a barrel, as we are all experiencing.

Secondly, the Water Quality Act, while supporting the existing Clean Water Act regulatory structure, strengthened and to some extent redirected our efforts to focus on regulating toxic pollutants, especially the list of 126 priority pollutants.

And finally, the Act strongly reinforced State responsibility in a number of regulatory and water management areas. For example, it assigns the States the lead for nonpoint source pollution, by requiring them to do assessments and management programs. Additionally, it recognizes State responsibility for controlling toxic discharges through their permit programs and water quality standards.

In this latter area, however, EPA has the authority, where necessary, to step in and take direct action.

In our efforts to implement this law in the last two years, we followed some basic principles. One was to provide the States flexibility in carrying out their responsibilities, where this was consistent with the statute. For example, to facilitate the transition to State revolving loan funds, we made the requirements for creating State revolving loan funds as flexible as possible under the law.

We emphasized the flexibility that the States have to select the waste water treatment projects they could fund, and emphasized

the States' ability to structure their loan programs to fund nonpoint source control and other eligible activities, but at their behest.

Another principle was to build as much as possible on the existing institutional framework, especially in addressing the point source changes. We had to build on existing activities rather than set up competing or overlapping requirements.

Even if this had not made sense from a regulatory standpoint, we really had no other choice in order to meet the deadlines set forth in the new law.

Finally, we emphasized, in both the point and nonpoint source control programs, that EPA and the States had to move forward very rapidly to deal with known problems rather than to launch new scientific efforts to find new problems of which we were unaware.

Concomitantly, we emphasized making the best possible use of available information, not only in our data systems, but reaching out to other Federal and State agency information where that might be relevant—particularly in NOAA and the U.S. Geological Survey or State agricultural agencies. These are examples of agencies we asked the States to work with.

In the State revolving loan fund specifically, the EPA is authorized to award grants directly to States until fiscal year 1994, to help them capitalize State water pollution control revolving funds. In January 1988, the Office of Water issued the principal document for implementing this program, called the initial guidance for State revolving funds, and we are now accepting comments on a draft regulation.

While there are issues with this program, I would describe it overall as an initial success. To date, EPA has made SRF capitalization grants to 28 States. This number is changing literally every day at this point—representing a Federal commitment of over $700 million.

We expect to award grants to another 12 States before the end of this fiscal year, bringing the total number of State revolving loan fund programs to 40 by September 30th. Thus, fiscal year 1989, exactly where we are now, is the major year for institutionalizing this program.

The major issues that have arisen as we have implemented the program relate to State revolving loan fund payments, cross-cutting Federal laws and authorities that are specified in the law itself, and applicability of State revolving loan funds to territories.

On payments, the law requires that Federal payments be made within two years of each capitalization grant. If EPA were to have made these payments in cash, it would have drastically accelerated the cash flow to the States and resulted in about $3 billion more in Federal outlays to States over the first five years of the program, as compared to traditional construction grant payout rates.

It was for that reason, with the encouragement of the Office of Management and Budget, that EPA developed a process of making payments to the States through the letters of credit.

The entire amount of the capitalization grant is made available to the States within the two years as provided by the law, but the cash is only provided when needed to pay for construction costs as

they are incurred by the communities to whom the loans have been made.

Another major issue is the existence of over 20 cross-cutting Federal laws and authorities that impose requirements on the State revolving loan fund programs that go beyond the plain words of the Clean Water Act.

A number of other Federal statutes, Executive orders and Federal agency directives are also applicable to any program providing Federal grants or other Federal financial assistance.

Title VI did not explicitly preclude the application of these other Federal authorities, and based on legal advice, we have applied them to projects funded from EPA's capitalization grants.

We felt we really had no other choice.

The third issue relates to the applicability of the State revolving loan fund program to small territorial programs that receive allotments under the program.

Senator CHAFEE. Mr. Chairman, could I just ask a quick question?

Rebecca, what you are referring to in your statement, on page 5, that would be, for example, the Davis-Bacon Act?

Ms. HANMER. Yes, Davis-Bacon is applied in the SRF program by the Clean Water Act. I was referring, however, to other Federal authorities that are not addressed in the CWA by their own terms, for example the Uniform Relocation Act.

Senator CHAFEE. That would apply to these loans?

Ms. HANMER. Yes.

Senator CHAFEE. The projects that come from the money from the loans?

Ms. HANMER. Yes. Now, where possible, we have limited the applicability to the projects that are funded with the initial Federal capitalization grant, not to other monies in the fund, or repayments in the fund.

So we have taken the most conservative approach we could to that, and I might say that even though there are a lot of cross-cutting laws with the SRF, it is only about half of the number of Federal laws that otherwise apply to the construction grants program. So it is a considerable decrease in the burden, but there is still some.

Senator CHAFEE. Thank you.

Ms. HANMER. The third issue, as I said, relates to whether or not the small territorial governments either have the size or the organizational structure to implement successful revolving loan fund programs. And that is a question we are looking at.

Finally, both EPA and the States have concerns about the ability of small communities to repay their loans, even at no or very low interest rates. To try to deal with this, we have expanded our outreach program to target information and technical assistance for small communities on low-cost technologies, financing options and financial management approaches that might be cost-effective for their size and nature of system.

I might add that this problem for small communities is compounded because of the burgeoning requirements under the Safe Drinking Water Act, which will also have a magnified effect on small communities over the larger cities.

The State program funding has become an issue because the change from grant to loan funding, which provides a long-term approach for meeting waste water construction needs, has as one of its byproducts leaving States with funding difficulties for their own water quality programs where they were depending on set-asides from the construction grants program.

We are concerned that this could result in serious erosion of the State base programs, as well as the States' ability to carry out their new responsibilities, and certainly this is, I think, the major issue we have in terms of implementation of these new responsibilities. There is simply no way that EPA could pick up the number of responsibilities being implemented by States.

So, we felt we had no choice but to look very seriously at the issue of how the States get the money they need to continue running the base enforcement and permitting programs, water quality standards, water quality monitoring, as well as to pick up new responsibilities for nonpoint source, and for unregulated pollutants of all kinds.

So, to help the States respond to this challenge, we organized a State funding study to deal with both the State water quality and drinking water funding issues. In this study, which has been going on for the last year, we have quantified the State water quality management needs. We have identified and initiated actions to stimulate State use of supplemental or alternative financing mechanisms, such as new or increased fees for services or special taxes that may be levied at the State or local level.

We have examined the criteria for Federal support of State water programs, and we are working to strengthen our partnership with State interest groups to implement the recommendations of the study.

This study has just been completed, and we will be using it in examining implementation options as well as looking at our fiscal 1991 budget planning process.

In controlling toxic discharges, the Water Quality Act set some very tight deadlines. We have responded, I think, at both the Federal and State level better than I expected we might be able to.

One such requirement, section 304(l), required the States to develop lists of specific impaired waters, including a special list of waters polluted by the priority toxic pollutants, and a list of the point source dischargers responsible for discharging these pollutants. For the point source dischargers, EPA and the States were required to develop individual control strategies.

States were to complete all of this work by February 4 of this year, and EPA was to approve or disapprove the States' actions by June 4, 1989.

At the same time, the amendments added section 303(c)(2), which required the States, as part of their triennial water quality standard reviews, to adopt criteria for the same priority toxic pollutants, where necessary to protect designated beneficial water uses.

EPA issued guidance to the States on implementation of the section 304(l) listing and permitting requirements in March 1988, and we have just promulgated our final regulation to establish the full implementation program and set forth the EPA criteria for reviewing State actions.

Under our regulations, the section 402 NPDES discharge permit serves as the mechanism for developing and enforcing the individual control strategies.

In implementing 304(l), we tried to maintain EPA and State efforts to address all pollutants causing toxicity in receiving waters, not just the toxic pollutants specified in the statute. We asked the States to give equal priority if they could.

In doing this, we emphasized the Clean Water Act general direction to maintain surface waters free of toxicity.

In the ideal world, we would have liked to have gone about this sequentially—developed the standards, developed the lists, and then developed individual control strategies in conjunction with comprehensive nonpoint source programs in the same areas.

However, we did not have the luxury of that kind of time. All of this had to be done simultaneously within two years. I am pleased to say that the majority of the States met the Section 304(l) deadlines for submitting lists of waters and control strategies to EPA.

Furthermore, EPA has already acted on 55 of the State and territorial submissions, essentially in compliance with the statutory deadline, and expects to complete action on the remaining State, Arizona, this summer. Where necessary, we have taken disapproval as well as approval actions.

Implementation of the requirements under Section 304(l) will in the near term result in more stringent controls on toxic pollutants for 879 source nationwide that are currently thought to be impairing 595 water segments.

To assure the State water quality standards will protect against receiving water toxicity due to priority pollutants, we have also made progress in implementing the requirements for State adoption for numerical criteria as part of their water quality standards.

We issued a final guidance for this in December, 1988, and we again encouraged the States to use the scientific information that was already available—especially available in EPA's Water Quality Criteria Guidance Documents for the specific pollutants in question.

However, the States do retain the flexibility to use other valid, scientific information and to set site-specific criteria where this is appropriate.

EPA is also working with the States to ensure that they are able to address adequately the other pollutants through their standards program, and in this regard we have focused not only on the 126 priority pollutants, but also on implementation procedures through biological assessment for the narrative free from toxicity standards, which potentially could cover all toxic pollutants, whether they are designated as priority pollutants under the law or not.

As EPA interprets the statute, the States, by February 4, 1990, are to have complied with the new requirements for numerical criteria for priority pollutants in their water quality standards.

I am pleased to say at this time that we expect almost all of the States to comply with the 1990 deadline. From the time the law passed, to the time this deadline occurs, we will have set, I think, hundreds of specific standards for toxic pollutants in the States, so it represents a major expansion of the regulatory base in the water quality standards.

Another of the Water Quality Act's initiatives to control toxic discharges was to mandate promulgation of effluent guideline regulations to set discharge regulations for certain industries. The new section 304(m) required EPA to publish and regularly update its plans for effluent guidelines initiation and revision.

The Act also required us to subject our plan to full public review and comment. We are behind on this. We published our proposal for public comment in August, 1988, and we have received a number of comments on it.

I think our final plan, while late, will benefit from the careful review and ranking of the many industrial categories that are potential candidates for regulation.

We need to be sure with our limited resources that we address the most important dischargers, in terms of environmental impact and regulatory needs. That is, those dischargers where the marginal utility of effluent guidelines is well beyond the existing permit or the municipal treatment programs which are the other regulatory alternatives.

The proposed plan identified three major industry guideline projects to which EPA was already committed: offshore oil and gas, pesticides, and the pulp and paper industry, and three industrial projects that are near completion.

In addition, however, we identified 15 additional categories of dischargers, for which we requested comments and which are candidates for the new guidelines.

We are evaluating the comments. We are also working out our budget proposals since expansion of this program will be costly, and we believe that we will be able to complete our plan by September 1989.

I have information in the testimony on storm water discharges and combined sewer overflows, but I think in the interest of time I will go right to the nonpoint source provisions.

Section 319 of the Clean Water Act requires the States to develop both nonpoint source assessments and a management program, and sets an extremely tight deadline for doing this by August 4, 1988.

We knew the States would find it very hard to meet this tight deadline, and for that reason, we stressed that the States should use existing information from a variety of sources at the State level and use public participation procedures to identify that information.

Unfortunately, even with flexible EPA guidelines, this initiative is running behind schedule, and deadlines were not met by many States. However, as of May 3 of this year, 55 of 56 States and territories had submitted assessments, and 45 States and territories had submitted draft or final management programs.

We have emphasized the need for all States to complete their submissions by August 4, 1989, a year from the statutory deadline. All assessment reports have to be completed and approved by then, or, as required by Section 319, EPA will begin developing Federal assessment reports in place of the States.

EPA also plans to complete its review and approve or disapprove all State management programs by January 4, 1990. Where nothing has been submitted, then we will issue a disapproval action. However, unlike the assessments, EPA does not have the authority

to step in and develop a management program where the State fails to do so.

Some States have provided sound assessments and management programs which provide a firm foundation for State action, but much remains to be done. We are working with the States to improve the most important aspects of their management programs, so that they can move expeditiously to full implementation.

We also established a task force at the Federal level to develop a blueprint for EPA and Federal action on nonpoint source pollution. We are working with the broad range of Federal agencies, especially the U.S. Department of Agriculture, to establish a viable national framework for addressing this pervasive problem.

Actually, the nonpoint source problem is a collection of many different types of problems. We are providing information through national and regional conferences and workshops, and we are also developing a national clearinghouse on techniques.

We are looking to other EPA programs, such as pesticides control, ground water protection, wetlands protection, the national estuary program, and the NPDES permitting program for stormwater, to reinforce the nonpoint source control efforts as they carry out their mandated program efforts.

We have also encouraged the States to use the funding flexibility available to them in title II construction grants and title VI for nonpoint source where they wish to do to.

We still have a long way to go in this program, however, as is obvious.

These are just a few of the many new activities that EPA and the States are engaged in to implement these amendments. As we look to the future, we do not see a need for major structural legislative changes, although a very large number of challenges lie ahead.

We have already talked about the State funding problem, which is probably the most serious challenge. We have not focused in this testimony on the National estuary program or wetlands protection, but these small programs are tackling very big habitat loss and land use management issues, and dealing with these issues as well as with water pollution is very high on our agenda.

Another area we need to emphasize is preventing and not just controlling pollution. Clean-up costs are high and increasing. While end-of-pipe controls provide strong incentives for source reduction and recycling, in some cases they may provide disincentives that are unintended.

I think we need to move directly to promote product substitution, source reduction and recycling of waste products as well as water conservation. Much stronger efforts are needed in all of these areas.

We have already seen how the 1985 amendments to the Food Security Act, for example, have helped encourage farmers to follow more environmentally sound farming practices, and more needs to be done here.

We need to educate the public on a variety of day to day activity changes—activities that cause pollution in the first place, and what they can do about them, as well as mobilize much more effective

local support for water program implementation and citizen monitoring.

The bill for citizens for water quality will be increasing, and it is profoundly important to improve our local base of environmental support and nourish more environmentally sound local land use management. This is obvious to anyone working in the coastal areas.

Congress has asked us for a number of reports that will provide the basis for future consideration of amendments. The most important reports will cover implementation of the State revolving loan fund program and the State nonpoint source programs.

As we see it, the law envisioned that its provisions were a trial period for the appropriate way to approach nonpoint source, in a sense, and that it envisioned coming back and looking at this approach closely in the 1991-1992 timeframe to see where we had gotten.

Also, as EPA's pollution prevention strategies and programs mature, that is, the source reduction activities I spoke of, I think we will have a better perspective for judging whether there are regulatory requirements or even statutory requirements that inadvertently restrict source reduction or other pollution prevention initiatives that should be addressed in future mandates.

I do not have anything to propose at this time, however. This concludes my prepared statement. My colleagues and I will be happy to try to answer any questions you may have.

Senator BAUCUS. Thank you very much, Ms. Hanmer.

You note we will face, and that we are facing, as others will testify later today, dramatic cuts proposed by the Administration in the construction grants funding program will put them in a bind.

I am wondering, is it the view of EPA that the State loan funds will be adequately capitalized at the lower funding rate?

Ms. HANMER. Well, I do not think we have ever used the words "adequately capitalized." I've said that the lower funding rate will enable us to go through with the SRF program and to address the highest priority needs.

I am not sure that I could tell you that even the full authorization at this time would fully do the job, but certainly we would not say that at the present levels we could do more than address the highest priority problem areas.

Senator BAUCUS. But given your sense of the needs in the States, how far off the mark is the Administration appropriations proposal?

Ms. HANMER. That is a difficult area to discuss, except with respect to the needs survey.

In our needs survey, the latest one, I think that we were talking about over $80 billion in unmet needs in principal categories. Either the Administration's proposal or the authorized amounts, of course, would fall far short of that, and we have felt that regardless of what we are able to do at the Federal level, we have got to look at generating a much stronger financial base at the local level.

Senator BAUCUS. That was the total need, is that correct?

Ms. HANMER. That was the need, as I recall it, for the common waste treatment parts of the need survey. It may not have included the additional needs for combined sewer overflows.

It does—it includes $16 billion for combined sewer overflows. We have had estimates from people who have come to see us that depending on what options they choose for the technology, that could be drastically underestimated.

Senator BAUCUS. What would the administration's reaction be if the program were extended for a greater number of years at a lower rate?

Ms. HANMER. I do not think I could speak for the Administration at this time. Certainly we have no plans.

Senator BAUCUS. Sorry?

Ms. HANMER. We have no plans for extending the program.

We have heard of a number of problems, largely with small communities, and one of the questions we might ask is what role the Farmers' Home Administration programs might play in that regard.

The combined sewer overflow issue is relatively new in terms of costing, and we really have not looked at that, in terms of the funding needs.

Senator BAUCUS. Since you have raised it, what about small communities? There is, as I understand it, a study that you may have participated in. It concluded that the smaller communities are having a much more difficult time coming up with the resources, and therefore it is much more difficult for them to participate.

Ms. HANMER. We did a municipal financing infrastructure report. I think we called it a sector study.

It was done by our Office of Policy, Planning, and Evaluation, but we participated in it. It looked at needs for communities, not only in waste water treatment, but also in safe drinking water and solid waste management requirements.

It shows us what we already knew, I think, and that is the bulk of local expenditures will continue to be for water supply and waste water funding needs, and that the smaller communities will have much more difficulty funding this through their local rate base than larger cities will.

So, it looked to us as if the municipal sector studies strongly emphasized the financial problems of the smaller communities.

Senator BAUCUS. As I understand it, one study concluded that 80 percent of the communities missing in the July 1988 compliance deadline were small communities—is that correct?

Are you aware of that?

Ms. HANMER. In terms of community size, that might be true. We tended to look at it in terms of discharge volume, and there were also some very large cities, if you look at it from the perspective of missing the deadline.

Senator BAUCUS. Well, does that mean we might end up with a core group of small communities who are unable to address their water pollution problems?

Ms. HANMER. It's possible. When we structured the national municipal policy, we did not cover the smallest communities whose discharges are so small they were not causing known water pollu-

tion control problems. So beyond the national municipal policy there was another universe of very small communities.

Senator BAUCUS. What about Farmers' Home Administration? Might the Farmers' Home Administration help here?

Ms. HANMER. I think that it obviously is a matter of funding. But from the standpoint of statutory authority, as well as program focus, I think that we have been talking with them a lot about this, as opposed to really getting back into the grant business ourselves for small communities.

Senator BAUCUS. Well, what do we do about the problem with smaller communities?

Ms. HANMER. Well, as I said, I think it is a matter of funding.

We also have been looking at technologies that are much more cost effective, such as small wetlands plants and other types of technologies that may cost less.

And at the worst, a community is represented before a judge, and demonstrates that it is financially incapable of meeting the requirements, and gets an extended schedule.

Senator BAUCUS. Thank you.

Senator Chafee.

Senator CHAFEE. Thank you, Mr. Chairman.

I must say, after listening to you, Rebecca, I have come to the conclusion that this is a very complicated area.

Terms that roll off, numerical criteria, free from toxicity standards—let me ask you a couple of questions.

As I understand the situation as far as those 595 water segments that are failing—those are areas where you had point source discharges, and the BAT, the best available technology did not produce the cleanliness that we sought. So then you have to go beyond BAT in those areas?

Ms. HANMER. Yes, sir.

Senator CHAFEE. OK.

I also understand that in addition to those 595, there are something like 18,000 others that are toxic hot spots, if you would, but those are not attributable to point source discharges. Is that the difference?

Ms. HANMER. The so-called long list was well over 17,000 water body segments.

Senator CHAFEE. Now, what is a segment?

Ms. HANMER. A segment is whatever the State defines it as.

Senator CHAFEE. Oh, thank you very much.

Ms. HANMER. It could be a very small portion. For example, the Washington, D.C. area of the Potomac River, or——

Senator CHAFEE. But you could decrease the number of segments by designating the river as a segment, so you have only one, instead of 5,000?

Ms. HANMER. We could.

Senator CHAFEE. You could show a lot of progress that way. We have reduced the number of segments from 18,000 to 12, the Mississippi River being a segment.

Ms. HANMER. May I add that the over 17,000 figure represents water body segments that are not meeting the water quality standards for any purpose. It could be these segments are not meeting the water quality because of chlorine discharges from a publicly-

owned treatment works, or it could be a variety of nonpoint source problems, or it could be the result of habitat destruction.

They are just sick waters.

Senator CHAFEE. But until you get some standards for these discharges, you cannot do anything about it, is that the problem?

Ms. HANMER. That definitely is not the problem.

Senator CHAFEE. All right, well, that is helpful.

What is the problem?

Ms. HANMER. Where the problem is caused by point source discharges, it means that we will be able to——

Senator CHAFEE. I can understand the point source ones, okay. Let's go the other others.

Ms. HANMER. We can do that through permitting.

For the non point-source, I do not see that there is——

Senator CHAFEE. Let me see if I understand this.

The 595 are attributable to point source discharges.

Ms. HANMER. Of the 126 priority pollutants.

Senator CHAFEE. And then the 18,000 or 17,000-plus are due to either nonpoint or to the non-priority pollutants?

Ms. HANMER. Yes, sir.

Senator CHAFEE. I got it.

All right, now, let's talk a little bit about pretreatment. It seems to me that pretreatment is a failure if I judge from the the GAO report, I believe it was on pretreatment that said 41 percent of the dischargers are violating their permit limits? Is that right or wrong?

Ms. HANMER. I have seen the same information, and I cannot verify it independently.

I can say that the pretreatment program is not working as well as it needs to be working. It depends on whether you look at it from the standpoint of where we have come, or where you have to go.

We do have nearly 1,500 local programs in place. There were a lot of people five years ago who thought that would never happen. In addition to that, I have seen estimates that we have perhaps reduced by 85 percent the amount of toxic metals and cyanide coming into these systems.

There is not nearly that much reduction for organics, but there has been a considerable amount of implementation. The issue is, has it gone fast enough and far enough, and we would agree that it has not.

Senator CHAFEE. Do we have any instances where failure of pretreatment has damaged the treatment facility?

Ms. HANMER. There are some instances of that. The more common would be where the lack of pretreatment is causing the permits to be violated, the discharge permits.

Until recently, as you know, we did not have a lot of toxic pollutant numbers in the city discharge permits. However, in the 304(l) identification process about 240 of the sources that were listed are publicly owned treatment works. So that represents——

Senator CHAFEE. My time is nearly up. One more quick question.

What about some alternative financing means, such as pretreatment fines on failure of pretreatment?

Ms. HANMER. You mentioned several things. I think certainly we are encouraging the States and would look ourselves at the issue of charging people transaction fees for permits and for other kinds of transactions—wasteload allocation analyses, scientific analyses of all kinds.

Using the dischargers to do more ambient monitoring, I think, is an excellent idea. I have been thinking about something like before and after studies, in which you could perhaps get a group of dischargers in a given area to do a comprehensive study every few years of the health and well-being of that area.

Senator CHAFEE. My time is up. I had better stop.

Senator BAUCUS. Senator Lieberman.

Senator LIEBERMAN. Thank you, Mr. Chairman.

Ms. Hanmer, I have heard some reports that the Administration may be considering transferring the administration of the nonpoint program from EPA to the Agriculture Department. Is there any substance to those reports?

Ms. HANMER. I think it depends on what you mean by administration. Certainly when you talk about what Federal money is being spent for nonpoint source pollution control, you would have to look to the Agriculture budget and the water quality initiative that was contained in President Bush's 1990 funding request.

This is essentially to get at the implementation issues. However, the Agriculture Department, the Soil Conservation Service and EPA have an agreement, and under that agreement, they have placed staff in the EPA regional offices. I also have a soil conservation man in my office. They are making staff available to the States. And they have said that they will target this money and this effort to the areas that the States tell them are the priority areas.

So, I would say it is not a matter of control. It is a matter of a very substantial investment in implementation.

Senator LIEBERMAN. So EPA is not going to be leaving this field in that sense?

Ms. HANMER. No, sir.

Senator LIEBERMAN. And you are satisfied with the nature of the relationship between EPA and the Agriculture Department in this program?

Ms. HANMER. Yes, I am satisfied with the relationship. No one can be satisfied with the progress we have made so far on agricultural pollution control, but the relationship, I think, is very positive.

Senator LIEBERMAN. Let me ask you a question. We had some concern when we heard that rumor, if I may demonstrate a bit of parochialism, because in Connecticut, we are not that oriented toward farming, and our nonpoint problems come from other sources.

So, I take it from your answers that we should have no fear that the Federal focus will now turn more toward farmer education and less toward other means of controlling nonpoint pollution.

Ms. HANMER. You will always have a realistic fear in terms of competing resources, but it is more in terms of identifying those areas where we can target nonpoint source investment to achieve the greatest environmental return.

The estuary programs, for example, would be my first choice in a lot of areas. In the Midwest, however, you might very well want to target it to the use of fertilizers and pesticides in farming operations. So it is more a matter of what are the problems, and do we have the resources and money targeted to the problem areas?

Senator LIEBERMAN. I appreciate that answer.

Let me ask you this question: how much confidence do you have in non-regulatory educational programs to deal with nonpoint pollution?

Ms. HANMER. I think it depends on whether or not the operation that you are communicating with looks like a business, and in effect is a business, or looks more like an individual.

There are a lot of reasons why heavy-handed regulatory approaches at least from the Federal level have limitations when you are talking about individual farm owners and individual people, and a lot of the nonpoint source things we want to do will affect individuals like that.

So, I think it really is a matter of how large the operation is, how serious the pollution problems are, and we are asking the States to make those choices at this point.

Senator LIEBERMAN. In your experience, has there ever been a significant and measurable cleanup as a result of relying solely on educational programs?

Senator BAUCUS. As a result of what was that again?

Ms. HANMER. Solely.

Senator LIEBERMAN. Relying solely on educational programs, as opposed to regulatory programs?

Ms. HANMER. I cannot cite an example offhand, but then I am afraid I have not looked.

Senator LIEBERMAN. Okay.

Ms. HANMER. Tax policy, if I may say—economic policy, to me, drives behavior very effectively in this country, more so than regulatory behavior. So I have seen a lot of voluntary changes in people's behaviors based on what the tax code made advantageous.

Senator LIEBERMAN. Is there something more we should do in that regard?

Ms. HANMER. Well, I think the 1990 Farm Bill—that is not so much tax code—but the 1990 Farm Bill will, I think, look at the incentives that we give farmers for certain kinds of practices, and might be the single most effective way to deal with nonpoint source problems in the agricultural community.

We need to deal with the farm problems, but we also need to go down to the heart of these problems through the kinds of practices that are encouraged by the Federal Government.

Senator BAUCUS. I might ask, do you mean tax incentives?

Ms. HANMER. I was thinking more of in the wetlands area, for example. There are some changes that have occurred in the tax laws that have made it less advantageous for people to set aside lands to make donations. That is one area that has been cited as a constraint.

But in terms of agriculture, I am speaking much more of the crop support program, and the kinds of economic incentives that the Federal Government makes available through that program for different kinds of farming behavior.

Senator BAUCUS. I am sorry, Senator.

Senator LIEBERMAN. Not at all, Mr. Chairman.

I would just ask one very brief question.

Earlier in the week, the President announced his Clean Air program, and there was a lot that was good in it, although some of us think there should have been a little more in it.

But I was troubled by one statement that our friend Bill Reilly, who I think has done such a good job, made, in which I believe he suggested that one of the sanctions that might be applied for failure to comply with new Clean Air requirements would be withholding of waste water treatment funds.

That troubled me because I do not think we want to encourage people to have clean air and give them dirty water in return, and I take this opportunity simply to convey that attitude to you as representing EPA.

I do not know if you have any response to it from your perspective.

Ms. HANMER. We discussed that issue, under the existing Clean Air Act. That is already possible, and our practice over the years has been not to deter needed waste water treatment where it was addressing existing pollution problems. But you might want to take a look at facility funding for new growth.

But I have not discussed with anyone the new Clean Air Act provisions in this regard, so I will have to get back to you.

Senator LIEBERMAN. Thank you.

Senator BAUCUS. Thank you, Senator.

Senator Warner.

Senator WARNER. Thank you, Mr. Chairman.

Administrator, we are delighted to see you again. We were just talking about your extensive knowledge and work in these areas, and we are quite interested in having your wisdom brought to bear on it.

Ms. HANMER. Thank you.

Senator WARNER. This is a tough series of problems.

Mr. Chairman, I would like to have my opening statement inserted in the record.

Senator BAUCUS. Without objection.

[Senator Warner's statement follows:]

OPENING STATEMENT OF HON. JOHN W. WARNER, U.S. SENATOR FROM THE COMMONWEALTH OF VIRGINIA

Mr. Chairman, I want to commend you for holding this hearing today. Too often I think we take for granted that there will always be clean water. We turn on the tap and there it is. I believe it is necessary to remind ourselves frequently just how important clean water is to this Nation and how it cannot be taken for granted.

Forty years ago, America started to come to grip with the idea that clean water was not a birth right, but something which had to be protected. The Clean Water Act has been amended from time to time and it was two and a half years ago that the Congress last revisited this issue.

With another two years to go on the authorization of 1987, it is entirely appropriate that we take this opportunity to review the status of the legislation and whether it is achieving the intended goals.

Efforts to clean the Nation's waters are particularly important for my own state of Virginia. The Chesapeake Bay is of vital importance to the Commonwealth. It is a commercial, recreational, and natural resource that must be protected. The actions of industries and municipalities all over the Commonwealth affect the health

of the Bay as many of the rivers on which major population centers are located flow into the Bay.

Mr. Chairman, there are two or three areas that I hope the witnesses here today will address. First, is the problem of Combined Sewage Overflow (CSO), which many cities face, including Richmond, Lynchburg and Alexandria in the Commonwealth of Virginia. It is appropriate that these systems be replaced with more efficient waste water treatment systems, but I believe that the Federal government at least begin to look at whether local governments with older combined sewer systems require special consideration in dealing with the problems they face.

In addition, non-point pollution is a major source of nitrogen in the Bay. I am very interested in continuing efforts to control non-point pollution.

I look forward to hearing the testimony of the witnesses on these and other issues.

Senator WARNER. I will direct my attention to several issues.

As you might imagine, Virginia is affected in primarily the older cities: Richmond, Lynchburg, and Old Town Alexandria, which many of us here on Capitol Hill enjoy in many ways.

So I would like to go first to the issue of cost. Does EPA believe that the cities with CSOs can address their CSO problem within the existing requirements of the Clean Water Act, relying solely on local funding?

Ms. HANMER. I think it depends on what we require the cities to do.

About 10 years ago, we I think laid back on combined sewer overflow controls, because there was a perceived problem—a severe cost effectiveness problem with the technologies that were then being used. Especially changes like separating sewers and the deep tunnel project in Chicago raised horrendous cost issues, and a lot of people questioned the water quality values.

As a result, we stepped back, except for a small amount of funding for the marine CSOs.

Under the guidance that we have put out, one of our goals was to bring all wet weather CSO, into compliance with the technology-based requirements of the CWA. However, we also allow a water quality based approach, essentially. That is, the design of the program could incorporate best management practices and not necessarily lead to major structural expenditures.

It would depend on the nature of the water quality problems in the area. And it is on that basis that I think people would have lower cost estimates. If, however, we mandated the equivalent of secondary treatment or mandated separate sewer or certainly mandated elimination of the discharge, that would be an extraordinarily costly program, and we simply have not faced what the cost implications would be, or where that would occur.

There are about 1,200 cities in the country that have combined sewer overflow systems. We have asked the States in our guidance by next January 15 to give us an inventory of the problems and to give us a priority list for addressing them. But right now, they have the flexibility to set differential permit requirements based on the nature of the problem.

Senator WARNER. Would you favor some grant funding be made available in localities where it can be shown that those costs exceed their financial capabilities?

Ms. HANMER. At this point, we are not favoring reopening the construction grants program at all, for any purpose.

Senator WARNER. On the treatment as a nonpoint source, this question. Does EPA believe that CSO should continue to be addressed as point source dischargers, or should they be specifically identified in the Clean Water Act and treated as a special discharge category?

Ms. HANMER. I think they are appropriately addressed as point source discharges. And particularly the dry weather flow—any dry weather flow of sewage that is coming out of a defective system we feel should be eliminated.

The wet weather flows—in our guidance, we would adopt a water quality based approach in which we would look at the standards for the area and the uses for the area, and try to design a program that made sense.

So, the flexibility that we would be talking about would be in the design of the permit conditions, not if you got a permit or not, and essentially, that would be the same as our approach to the storm water at the moment for point sources.

Senator WARNER. Did you address today the status of the guidance document being developed by the EPA, the timing?

Ms. HANMER. On combined sewer overflows?

Senator WARNER. Yes.

Ms. HANMER. We issued an interim final guidance document in January, and it has been at OMB, but people have been operating on the basis of the interim final.

Senator WARNER. What is the prognosis?

Ms. HANMER. It is issued.

I would say that we are moving along fine under the guidance we issued.

I still think it is going to be a costly program, and what I mean by moving along right now is, we are doing the strategy, and we are expecting to receive strategies from the States early next year.

Senator WARNER. The penalty action contemplated against a CSO city—what do you contemplate there?

Ms. HANMER. Well, if a permittee does not have permit requirements, that constitutes a discharge without a permit, and the first stage is actually getting a permit in place.

So, I am afraid a lot of these violations may be occurring, because either EPA or the State has unfinished business in the permitting, and in that case, I do not think we would be talking about penalties.

Certainly where we have established combined sewer overflow requirements, and they are in the permit, then the permittee would be liable for violations of that permit, just as for any other permit.

Our priority, by the way, would be in the estuary areas. Combined sewer overflows are showing up as much more serious problem than we thought they were, as we look at Long Island or as we look at New York-New Jersey Harbor and some of these other areas.

They are showing up as a very serious water quality problem.

Senator WARNER. I thank the witness.

I thank the Chair.

Senator BAUCUS. Thank you, Senator.

Ms. Hanmer, I would just like to follow up and encourage EPA to move expeditiously in developing more forthrightly and even in more number industry and effluent guidelines.

As you know better than most, EPA had initially been quite successful in developing I guess what, the first six industrial effluent guidelines, is that correct?

Ms. HANMER. We have about 50 guidelines in place at the moment.

Senator BAUCUS. Fifty? Five zero?

Ms. HANMER. I think that's right, yes.

Senator BAUCUS. Well, I encourage the agency to keep moving.

Ms. HANMER. Thank you.

Senator BAUCUS. That is very important.

Second, I would like you to give the committee your thoughts on developing more assistance for smaller communities. We discussed this earlier today.

Ms. HANMER. Sure.

Senator BAUCUS. In addition, alternate sources of funding—we talked about fees, and I am sure EPA has some other ideas. That would be very helpful.

Ms. HANMER. Yes, sir.

Senator BAUCUS. And then, finally, I want to compliment you as a witness. You are an exceptional witness.

Ms. HANMER. Thank you.

Senator BAUCUS. It is clear that you did not just start thinking about all this today.

Ms. HANMER. Twenty-three years, I am afraid, and I am still learning.

Senator BAUCUS. You have an excellent command of the subject and excellent control and balance, and I want to compliment you for all that you have done.

Ms. HANMER. Thank you very much.

Senator CHAFEE. Just one question if I might, Mr. Chairman.

I want to join in the Chairman's praise. You have this subject mastered, Rebecca.

I want to thank you for coming up to Rhode Island when you did, and your appearance was received with great approval. They appreciated it, and I appreciate it, too.

Ms. HANMER. Thank you.

Senator CHAFEE. Let me just ask you one word; you mentioned something about the tax code, and the Chairman had a follow-up question on it, but I missed that.

Where in the tax code do you think we could be helpful? You said even more than regulations, the tax code changes could possible do more to clean up our waters than anything else.

Ms. HANMER. I was really speaking generically. The Senator had asked me whether I had ever seen education work, and I was thinking, well, I was not sure about that, but I had surely seen financial incentives work, and the only tax issue that I have heard of is the one that I mentioned.

But I am not an expert. I would be glad to get you some of that.

Senator CHAFEE. Could you repeat that, please?

Ms. HANMER. In working in wetlands conservation, we have been trying to encourage landowners, for example, perhaps, to donate wetlands, to create trusts, and that kind of thing.

Senator CHAFEE. Yes.

Ms. HANMER. Apparently some of the tax changes that have occurred have created a disincentive for doing that, that we have been looking at in the wetlands agenda.

The other issue was more the economic issues associated with how we finance the crop supports in agriculture, and not a tax reform issue.

Senator CHAFEE. I just want to say as we dealt with the Clean Air Act, I began thinking about the failure in our Government to have what you might call an overall view of these subjects, whether it is clean air or clean water.

For example, in the Clean Air Act, somebody pointed out to me that it's perfectly all right for an employer to provide parking lot spaces for his employees, but if the employer should give each employee X dollars for public transportation, that would be questionable whether that could be deductible—or it might well be taxable to the employee.

It just shows that an overall view is not taking place in our Government, and I am not sure where it would take place. But here in this area, where talking clean water involves, as you mentioned, the tax code, to some extent, the agriculture department—unfortunately we get funneled down in one area or the other EPA in our case, and we do not have this overall view.

And I am not sure where it would come—CEQ, possibly. It is a little out of their jurisdiction, likewise.

Ms. HANMER. Well, I recommended to the administrator that we, in looking at our pollution prevention strategy in the Office of Water, I found that we simply could not approach it as an overall issue. We had to go sector by sector.

We had to look at the agricultural sector, we had to look at how transportation is handled in this country, we had to look at commercial development. I recommended that the Agency consider, as part of its pollution prevention program, setting up a bunch of sector studies, so that we could look at what are the economic forces, what are the practices and which of those practices are driving unintended environmental problem behavior, and what needs to be done about it.

Senator CHAFEE. Well, just in conclusion, what is this statistic that frequently is used as far as the contribution, percentage-wise, to pollution in our lakes and rivers of nonpoint sources? Have you folks not sometimes said that it is 50 percent of the total, or more?

Ms. HANMER. Yes, we have.

Senator CHAFEE. The nonpoint source?

Ms. HANMER. Yes.

Senator CHAFEE. What statistic? Is that at 50 percent?

Ms. HANMER. I see a 40 to 60, is what I see.

And it of course depends on the area. It depends on the lake, but generally speaking we talk about 40 to 60 percent in both lakes and estuaries.

Senator CHAFEE. Okay, fine.

Thank you very much.

Thank you, Mr. Chairman.

Senator BAUCUS. Thank you, Senator.

Thank you very much, Ms. Hanmer. We very much appreciate your testimony.

Our next panel consists of three witnesses: the Honorable Leslie Carothers, Commissioner of the Department of Environmental Protection for the State of Connecticut; Mr. Robert Adler, Senior Attorney for the National Resources Defense Council, and Mr. Robert Reich, Consultant, Water Pollution Control with DuPont Corporation, representing the Water Pollution Control Federation.

I remind each witness that each will be held to five minutes of testimony. I encourage each witness also to submit their written testimony for the record. Let us proceed.

STATEMENT OF HON. LESLIE CAROTHERS, COMMISSIONER, DEPARTMENT OF ENVIRONMENTAL PROTECTION, STATE OF CONNECTICUT, ACCOMPANIED BY RICHARD BARLOW, CHIEF, WATER PROGRAM

Ms. CAROTHERS. I am sorry that I do not have the agenda in front of me, so I did not know that I was first up.

Good morning.

Senator BAUCUS. Did you want to be second or third?

Ms. CAROTHERS. No, no, no, that is fine.

Senator BAUCUS. All right.

Ms. CAROTHERS. I am Leslie Carothers, the Commissioner of Environmental Protection in Connecticut, and I am pleased to be invited this morning to speak for Connecticut on our experience in the regulation of toxic water pollutants.

I have submitted statements from the record, and I will summarize as briefly as possible.

I have with me Richard Barlow, who is head of our Water Program, in case you ask me a question that I falter on.

The intent, as we understand it, of the 1987 amendments and particularly section 304(l) was to require the States to identify water bodies damaged by toxic pollution, to identify the point source contributors, and to develop control strategies.

In Connecticut, we were fortunate in that we were off to a head start on this effort. That was because starting in 1987, the State began the development of a program using bioassay testing to regulate aquatic toxicity, and that program was in full swing by last year.

What I would like to do in my remarks is describe briefly our approach and comment on what it implies for the utility of the Clean Water Act provisions and the directives that have been or may flow from it.

Basically, we required all dischargers, industrial and municipal, believed to have toxic chemical discharges to do a discharge toxicity evaluation, involving bioassay tests using both fish and invertebrates, minnows and Daphnia, and to test their whole effluent, undiluted, on those species.

Almost all of those required to do the testing had done it by the end of last year. The way the program works is that where toxicity is found by this method, the discharger has to work upstream and

figure out what the source of the problem is, and then define a remedial strategy.

Those strategies, once the contaminant is found, have ranged from moving the outfall away from very small streams to totally eliminating the use of certain problem chemicals.

When we introduced this program, there was considerable nervousness, I think it is fair to say, on the part of both industry and the municipalities, because it was viewed as a novel technique, and the results were not entirely predictable.

And of course, when the results occur, the evidence is quite compelling. If the minnows float to the top, you know you have a problem. So, with that database, we prepared our 304(l) submission.

Our data allowed us to identify 29 point sources where we believe that the listed priority pollutants were the issue. In commenting on what we think perhaps the limitations of the 304(l) report were, first of all, I think it is apparent that there was some kind of confusion and inconsistent interpretation of the criteria for what is reported.

As I look at the list, I see that Connecticut has 25 priority polluters reporting. New York has 5, Texas and Illinois have 6, Pennsylvania has 180. I mean, frankly, there is something screwy going on there.

And I am not suggesting any fraud on anybody's part, but I am suggesting there was a quite disparate interpretation of the requirement, and frankly, I think that affects whether there really is an adequate baseline, which is I think what the Congress was looking for.

The second issue is that it is our opinion that for aquatic toxicity—and I distinguish that from human health effects, which I will discuss in a minute—biological testing, bioassays are a much more potent and effective tool for measuring and dealing with toxic effects than reliance on numerical criteria for individual chemicals.

I indicated we had 29 point sources where priority pollutants were the problem. We also found 26 cases where there were no priority pollutants involved, and something else was causing the problem, and in many of the 29 cases where there were priority pollutants, even in those cases, we found that the toxicity was something like ammonia or surfactant or biocides, which are not on the priority pollutant list.

So, the bottom line is that for effects on aquatic biota, we think that biological testing is better than doing it by the numbers. Clearly in the area where human health effects are involved, we have to rely on numerical criteria, because obviously you cannot do a bioassay test on people.

We do not have a great need for numerical criteria for drinking water, because in Connecticut we do not allow the discharge of pollution upstream of drinking water intakes, period.

But we are very interested in having EPA's help and continuing the effort to develop numerical criteria in cases where the issue is bioaccumulation in shellfish, accumulation in sediments, and those kinds of potential food chain effects where we recognize the need for numbers.

I will conclude my testimony with that.

Senator BAUCUS. Thank you, Ms. Carothers. Mr. Adler.

STATEMENT OF ROBERT ADLER, SENIOR ATTORNEY, NATURAL RESOURCES DEFENSE COUNCIL

Mr. ADLER. Thank you very much, Mr. Chairman, and members of the committee, for inviting NRDC to testify today and particularly for making the decision to hold oversight hearings on this very important subject at this time.

Our written testimony is quite extensive and addresses most of the topics requested by the committee. I would submit that for the record at this time, and restrict my oral presentation primarily to the provisions of the 1987 Water Quality Act addressing toxic pollutants.

Our testimony and the scorecard on clean water that we presented to the committee about a month ago present somewhat harsh views of the EPA and their implementation of the Act, but let me temper that harshness for now, and compliment EPA on two recent occurrences.

One is getting out the 304(l) regulations in a timely fashion. And we believe those regulations are fairly strict and will result in some significant additional progress.

Second, on getting out in a timely fashion the list of toxic hot spots which have been referred to extensively this morning.

However, having identified almost 20,000 severely polluted waters in the United States, we think that there are serious problems with EPA and State implementation of the Act in terms of how to clean up those waters.

The 1987 Act launched a three-pronged attack on toxic pollutants. The program is commonly referred to as beyond BAT, but going beyond BAT assumes that you first get to BAT.

And what I think EPA is doing the worst job on is completing the BAT regulations under section 304(m) of the Water Quality Act.

I thank the Chairman for his remarks encouraging additional promulgation of effluent guidelines and pretreatment standards. In fact, there is a huge database showing that hundreds of millions of pounds of toxic and nonpriority hazardous pollutants are escaping BAT regulation and reaching our rivers and lakes and coastal waters, and in addition, our sewage treatment plants. In addition to posing human health risks and threats to the environment, I think that it is highly ironic that the nation has invested more than $100 billion in the past 15 years on its sewage treatment plant infrastructure, and we are severely jeopardizing that investment by allowing some of these toxic pollutants to reach some of our sewage treatment plants.

The GAO report referred to by Senator Chafee earlier pointed out that about 20 percent of sewage treatment plants around the country are reporting corrosion, interference with the biological treatment process and other damage to the sewage treatment plants.

Let me give you a few examples of the types of industries that are escaping BAT regulation. The NRDC consent decree signed in

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1976 identified a number of priority industries, but was by no means exclusive.

Industries that were exempted from the consent decree are discharging, by figures in the domestic sewage study and figures in EPA's own documents, over 38 million pounds a year of toxic pollutants.

New industries that were not covered by those regulations were cited as discharging over 62 million pounds of toxic and nonconventional pollutants, and the hazardous waste treatment industry alone, which because of the legislative structure that arose after 1976, is receiving hundreds of millions of pounds of toxic pollutants that we are pumping out of the ground water, treating to some degree and releasing right back into our surface waters.

This industry is not subject to BAT, it is not subject to pretreatment standards, and we view it as a major loophole in the combined system of controlling toxic and hazardous pollutants under both the hazardous waste laws and the Clean Water Act.

The second major prong of the Water Quality Act are the Water Quality-Based controls designed to go beyond BAT. We have two major problems with EPA's implementation of that program.

First, Congress very clearly indicated that States were to promulgate numeric criteria for water quality standards, and as Ms. Carothers correctly pointed out, the biological monitoring approach addresses aquatic toxicity, but does not address human health.

We think that it is very important that States promulgate numeric water quality criteria, and in many cases, EPA is allowing States to evade that responsibility.

The third prong is the 304(l) program. Again, I compliment EPA on getting out the list of hot spots. What they did not emphasize, however, is that less than 5 percent of those hot spots will be cleaned up under what we view as an inappropriate and unduly narrow interpretation of section 304(l).

We refer to this as the case of the disappearing "s". Congress devised three lists of toxic hot spots, and with respect to all three lists—and you very expressly used the plural—you instructed EPA and the States to identify point source discharges not only of section 307(a) toxics, but other toxic pollutants as well.

Senator Chafee has a number of references in the 1987 legislative history to the fact that toxic nonconventional pollutants can be equally or more dangerous than the toxic priority pollutants, and EPA is ignoring those types of point source discharges under its approach to section 304(l).

Senator BAUCUS. Thank you very much, Mr. Adler.

Mr. ADLER. Thank you.

Senator BAUCUS. Dr. Reich.

STATEMENT OF ROBERT REICH, REPRESENTING THE WATER POLLUTION CONTROL FEDERATION

Mr. REICH. Good morning. I am Bob Reich. I am a registered professional engineer in the State of Delaware. I am a consultant in the field of water pollution control for the DuPont Company, in the engineering department, and I am here today on behalf of the Water Pollution Control Federation.

WPCF was a strong proponent of the 1987 amendments, and the Federation has been a staunch supporter of the control and elimination of toxic substances in toxic amounts in waste water discharges.

The success of the technology-based controls, which is largely the result of Congressional actions back in the seventies, enables us now to focus on the toxic control problem.

Congress has recognized this next phase and rightly emphasized toxic controls in these 1987 amendments. The source of tonics are varied, and they are not easily identified in many cases. Toxic controls are not simple engineering functions, and it is a very site-specific situation.

Technical support from EPA on toxicity identification and reduction has been unrealistic, really, and is not keeping pace with the imposition of permanent limits on aquatic toxicity. And that is what we have been nervous about, as Ms. Carothers had mentioned.

In construction section 304(l), Congress set forth a time schedule so tight that it really hindered the sequential development of assessments and controls. I think that has been alluded to, some. As a result, States have been forced to act with extremely limited data, generally few numerical water quality standards and really little public input.

We understand the Senate version of the original 1987 Water Quality Act allowed some additional time for completion of the various tasks, including an additional couple of years to develop the individual control strategies.

This kind of expanded time frame would have alleviated some of the pressure, but more time still should have been allowed to perform the water quality assessments. Such timing would have enabled some of the following critical activities to be accomplished: first, water body sampling. Very few of the stream segments have really been subjected to monitoring for the priority pollutants.

Consequently, worst case assumptions have been made which are likely to unnecessarily list waters and subject discharges to the unfair burden of the costly individual control strategy requirements.

Second, development of water quality standards, because many of the States have few numerical standards for toxic pollutants. EPA directed the States to use EPA water quality criteria, which have not been tailored to the specific needs of the water body and have not received public participation as required by Congress.

Third, the implementation of best available technology. Few States have had time to complete the issuance of their BAT permits, so that the improvements which will have accrued have not necessarily been taken into account.

And finally, public participation. Few States found it possible to allow input to their 304(l) programs. The recent EPA notice that came out seemed to recognize this situation.

It allows a four-month comment period, and the Federation supports this, and hopes that Congress or EPA can find a way to allow for the impact of the potential delays it will have on implementation.

In addition, Congress or EPA should consider how the entire 304(l) program can be integrated most efficiently into the State and Federal permitting programs. States, EPA regions, industries, municipalities—all allocate the resources allowing for a five-year permitting cycle, not a shifting target. Yet a number of associated programs are being implemented near term on somewhat differing schedules—programs such as BAT permitting, the 304(l) requirements, the storm water permitting.

With the exception of discharges to certain obviously impaired waters, we believe these programs should generally be integrated into the regular cycle of section 402 permitting.

Congress also should recognize a necessary time frame for compliance with the permits developed based on individual control strategies. For direct discharging industries, a three-year compliance schedule ought to be anticipated from permit issuance to determine the sources, levels, controls and design, construct and start up the facilities.

For a publicly owned treatment works, more time may be needed, because in many cases, ICS limits have to be transferred to the indirect discharger.

Finally, EPA is implementing 304(l) as strictly a point source program. However, just released 304 data highlight the need for greater resources to implement nonsource programs, and this has been mentioned a number of times today.

I would like to reiterate WCPF's strong support of funding for the section 319 program. We are concerned that the Administration's proposal to fund nonpoint source programs by earmarking 106 management funds will amount to nothing more than robbing Peter to pay Paul, and will place an even greater strain on the States as they struggle to implement the many other new responsibilities they have got.

In summary, the technical foundation language of the 304(l) provisions seems to really have been right on the mark. The timing set forth by Congress, though, has really required some Herculean efforts on the part of the States and EPA simply to comply with the deadlines.

Consequently, it has led to inaccurate and potentially unfair assessments to date, and unless some kind of mid-course correction can be implemented, the provisions not yet implemented will lead to unachievable schedules for permitting and compliance.

I thank you for having the opportunity to testify, and hope I can answer your questions.

Senator BAUCUS. Thank you very much, Dr. Reich.

On that last point, could you give me some examples or evidence that demonstrates that perhaps the timetable is too short, and is causing inaccurate results?

What is the best evidence or the best example you could think of?

Mr. REICH. Well, the best evidence is that, for example, we had a plant in Virginia that was originally earmarked— this is DuPont— to be on one of these lists. Fortunately, or unfortunately, it reached the papers, and we looked into it, and were very surprised to find out that it was based on some misinterpretation of discharge data, with no consideration of the actual water conditions in the State.

That was a situation where we were able to come to grips with the States as to what the problem was, but we happened to see this in the newspaper. There was no opportunity for public input to deal with the situation.

Senator BAUCUS. Mr. Adler, could you expand a little bit more for me your concern that perhaps EPA is not moving as quickly as it should in developing fluent guidelines for additional industries?

Mr. ADLER. Yes, I would be happy to.

Again, the 1976 consent decree was limited in scope, but was never intended to be exclusive, and Congress recognized this in 1987, and instructed EPA to identify all existing guidelines that were incomplete, and all additional guidelines that were necessary.

I refer both to BAT guidelines for direct dischargers and pretreatment standards for indirect dischargers.

EPA was supposed to have a final list of guidelines subject to change and promulgation in February of 1988. They did not get the draft list of guidelines out until August of 1988, and based on Ms. Hanmer's testimony this morning, will not have the final list until September.

Perhaps more importantly, the list that they proposed last August essentially included only guidelines for which they are under existing court order, or the pesticide industry, which was subject to a very specific statutory requirement in 1987.

One additional guideline, the pulp and paper industry—was listed—but they did not commit to any deadlines.

So, their proposal was essentially the status quo.

Senator BAUCUS. What additional candidates come to mind?

Mr. ADLER. We have a list of candidates in our written testimony. I cited a hazardous waste treatment industry earlier, but we also list industries such as pharmaceuticals, equipment manufacture and assembly, industrial and commercial laundries. The other list on page 5 of our testimony, the list of current inadequate guidelines on page 6 of our testimony, coal mining, iron and steel, etc.

Senator BAUCUS. What in your judgement, explains the disinclination of EPA to move more guidelines for additional industries, is it funding, is it just lethargy, what is it?

Mr. ADLER. I do not——

Senator BAUCUS. What is your best guess?

Mr. ADLER. I think it is lack of resources.

Developing an effluent guideline takes a lot of time and effort, and I think EPA needs a bigger staff and more resources to do that job.

Senator BAUCUS. I have one more question on monitoring.

Could any of you give me a little better idea of how or what degree we have additional monitoring, so that we have a better idea of whether we are hitting the nail on the head? That is, it is not only monitoring the pollutants, the effluents and so forth, but other lakes and rivers and streams that perhaps are less toxic right now, but perhaps if we had better data, we would be spending more time addressing them.

Could you give me a better sense of how we could go about additionally developing efficient additional monitoring systems?

Mr. REICH. It really would not be too much of a stretch to expect, for instance, State agencies, possibly with the assistance of dischargers, to assist in the monitoring of rivers and lakes, water bodies, taking some periodic analyses for the various priority pollutants in the water column and in the sediments, and I think it would go a long way towards showing we are hitting the nail on the head.

In addition, some biological assessments in some of the key areas that we consider to be impaired would be worthwhile, to determine whether they are indeed impacted by discharges of a relatively minor nature of tonics.

Senator BAUCUS. Do you have any thoughts?

Mr. ADLER. Yes, let me answer by way of example.

The State of North Carolina, which relative to other States, I think, did a fair job on the 304(l) process, only has ambient monitoring for about 15 priority pollutants out of 126. So our database is woefully inadequate in terms of identifying all of the polluted waters in the country.

I think the same is true for many other States.

Senator BAUCUS. Okay, I see my time is up.

Senator Chafee.

Senator CHAFEE. Thank you, Mr. Chairman.

Ms. Carothers, you have talked about in-stream monitoring. In Connecticut, do you charge any fees for that, or from the dischargers, for the monitoring? Do you get any money out of them?

Ms. CAROTHERS. Well, not by charging fees for in-stream monitoring, usually.

Clearly, the studies that they were required to do—the bioassay studies, they paid the bill for that. And we have, on occasion, where we have detected a problem that we may believe is a result, for instance, of non-compliance, require the source to do the monitoring at their expense.

However, in general, we fund our in-stream monitoring program ourselves. The program is pretty extensive, and we think it provides a more real world picture of what is happening than numerical calculations.

Senator CHAFEE. Let me ask the three of you a question.

You heard the previous testimony of Ms. Hanmer where she said that 40 to 60 percent of the pollution in our lakes, rivers and streams is nonpoint source.

In the 1987 Act, we did not do much about nonpoint source. You get into a buzz saw, because that gets into that terrible area of land use planning, to which there is great resistance.

What do you think we ought to do? We can only ratchet down so far the nonpoint source pollution, and we can do better, possibly, on that.

But if we are going to tackle this great big 40 to 60 percent, what should we do? In 30 seconds or less—Dr. Reich.

Mr. REICH. I believe that you do need to start off with education of the public, because that is where a lot of this comes from. I think that is the first step before getting into specific requirements on controls, individuals have to recognize their own responsibility.

Senator CHAFEE. Yes, that is great, but how does an individual recognize his own responsibility? He has some oil dripping out of

his crankcase, and goes along the highway or parks his car somewhere, and it washes down from there into the stream.

Tell me how an individual shows greater responsibility.

Mr. REICH. I think that is an excellent example of why individuals need to understand how they impact the environment.

We have got 240 million cars, or some number like that, doing that exact same thing. If everybody paid attention to what they were doing, there would be a lot of improvement just through public participation right there.

Senator BAUCUS. May I ask what does one do there, if I might? That happened to me just two days ago. My car was parked in front of my house, and I walked outside, and there was all of this stuff coming out of the engine, and it turned out to be the antifreeze which had just leaked out.

I quickly went over to the service station, and he said, "You need a new water pump."

What do I do when I walk out and see it dripping down the gutter?

Mr. REICH. Well, I think your reaction there—one of the things you need to do is what you did, and the other thing you need to do is clean it up, rather than letting the rain water wash it away.

It is hard to believe that that sort of thing can really work to help, but when you have 240 million people doing something together, it is going to make an impact.

Senator BAUCUS. Well, I must confess, I did not go out and clean it up.

Senator CHAFEE. Well, I think you are a good citizen, Senator Baucus, for immediately going down and getting it repaired.

Mr. Adler.

Mr. ADLER. We have no standard approach to nonpoint source control. We need a specific waste load allocation for every watershed polluted by nonpoint sources, and to identify what percentage of the pollution is from the nonpoint sources. The programs have to be targeted to that degree.

Senator CHAFEE. Okay, it is agricultural runoff.

Mr. ADLER. Yes. If the State cannot demonstrate that a voluntary program will achieve that specific load reduction, they need to look at regulation.

Senator CHAFEE. And that should come from the State?

Mr. ADLER. Yes.

Senator CHAFEE. Because certainly we would have great trouble doing anything from the Federal level in that area.

Mr. ADLER. I think EPA needs to make sure the States are doing that properly, but it is fundamentally a State function.

Senator CHAFEE. Ms. Carothers.

Ms. CAROTHERS. I agree that it is a State and, in many cases, a local function. It is everything from acid deposition to spills to siltation from construction. I think you have to have a variety of strategies, and you do, as Ms. Hanmer says, have to focus on the specific sectors and approach it that way.

Senator CHAFEE. Are you in Connecticut able to make much headway in that?

Ms. CAROTHERS. Well, it is very hard to measure whether we are even making headway in this program, which is one of the problems with it.

But we do think we have achieved some results in reducing through very unusual programs, some of the use of pesticides. We think we have pretty strong erosion controls, as a result of local and State regulation.

We have a big problem—we regard our contaminated sediments as a major nonpoint source of pollution, and frankly we do not have any easy answers to that, but we are looking at that harder.

Senator CHAFEE. You mean these are sediments that are on the bottom—PCBs?

Ms. CAROTHERS. In our harbors and estuaries, we think that sediment pollution is a significant source of our problem, and the answers there are not easy.

Senator CHAFEE. Thank you, Mr. Chairman.

Senator BAUCUS. Senator Lieberman.

Senator LIEBERMAN. Thank you, Mr. Chairman.

May I first say what a pleasure it is to welcome Commissioner Carothers here, and Dick Barlow, who is her Water Quality expert and administrator.

I am a little biased in this regard, Mr. Chairman.

In my previous incarnation as Attorney General of Connecticut, I always thought that Leslie Carothers was one of my best clients.

And that is particularly noteworthy because she is a lawyer, and you know how difficult it is to have a lawyer as a client. So I am very proud to welcome her here, and say that I personally believe that she is one of the best environmental administrators in the country.

Commissioner, you have talked about Connecticut's unique approach, which is in contrast to the intention, apparently, of the 1987 amendments, which seem to pursue a pollutant by pollutant approach, as opposed to the overall approach that you are taking in Connecticut.

Do you think we ought to change the law, change 304(l) to go for the broader approach that Connecticut is following?

Ms. CAROTHERS. Well, I do think we have all indicated that the sources of toxicity are much more—go much beyond the priority pollutant, and sometimes they really are not the problem at all, even if they exceed the numerical standards.

I do think that whatever approach is made permanent regarding toxic control strategy, it should allow the flexibility to use what we regard as a more sophisticated measuring method for aquatic toxicity effects.

Senator LIEBERMAN. Do I gather correctly that some of the most notorious cases in our State, perhaps the Upjohn plant, are not involved with priority pollutants, or at least that there are some of the other sources of the problem there that are non-priority pollutants?

Ms. CAROTHERS. Yes, and we have found, for instance, that with many of our platers, the problem is the surfactant, and not the metals. That is causing the problem. So it has been very revealing and quite interesting.

Senator LIEBERMAN. You have a substantial metal finishing business in the State which is a source of pollution, and apparently not among the priority pollutants.

Mr. Adler, how do your thoughts about moving to more clearly numerical standards relate to the approach that Connecticut is taking?

Mr. ADLER. Well, let me say that we strongly support using biomonitoring and whole effluent toxicity approaches toward pollution control, but as a supplement to numerical standards, not to supplant them.

They address different problems. They address things like cumulative toxicity and synergisms, and we believe that is a very important part of the program.

Senator LIEBERMAN. Do you think generally, Mr. Adler, that the States have enough enforcement authority to prevent the discharge of toxic pollutants from nonpoint sources?

Mr. ADLER. The Clean Water Act provides the general authority for States to develop nonpoint source programs, as I outlined it to Senator Chafee, and that is the waste load allocation water quality standards program.

I think the States need to develop their own statutory programs within the State to implement those programs.

Senator LIEBERMAN. You think the States could use more authority in that regard?

Mr. ADLER. I think that it would certainly help to have a stronger Federal program.

Senator LIEBERMAN. Just to repeat the question that Senator Baucus asked you, I have looked at the scorecard that NRDC has done, and it is distressing, on EPA activity here.

But if you had to make one remedial response, it really would be for more money and more staffing, is that correct?

Mr. ADLER. Particularly for the 304(m) program. In some cases, we think the legal interpretations of the Act need to be corrected.

Senator LIEBERMAN. One of the things, while I have got Commissioner Carothers here, that struck me, not only in nonpoint but in this whole problem of water pollution, sewage treatment particularly, is the question of whether we are doing enough to encourage new technologies.

As you watch Federal funding in this whole area of construction grants or sewage treatment grant programs go down, we wonder whether there are more cost-effective ways to deal with those kinds of pollution. I had somebody in my office a couple of weeks ago that said that basically every time another municipality or a region needs to develop a sewage treatment program, they go to the shelf and take the same massive plans and just reproduce them.

I wonder if there is anything we should be doing to be encouraging technological breakthroughs in this area, that might be more cost effective? I would invite any of you to answer that question.

Ms. CAROTHERS. I think the answer is no, we are not doing enough.

Mr. ADLER. I think we train two types of engineers—one who learn how to make things, and one who learn how to treat the waste product. I think that we need to merge those two disciplines

in our engineering programs, and learn how to produce things in manners that do not produce so much waste.

Senator LIEBERMAN. Dr. Reich, is anything happening that you know of in the private sector to develop new technologies, particularly for sewage treatment, that might be more cost effective?

Mr. REICH. It is hard to get better technology than biological treatment for general sewage treatment, and the new technologies are coming in—the toxic source controls. And that is definitely occurring.

Senator LIEBERMAN. Great, thank you.

Senator BAUCUS. Any more questions?

Senator LIEBERMAN. No.

Senator BAUCUS. Okay, thank you very much.

Thank you, panelists.

I am going to exercise the prerogative of the Chair and cut the testimony down one minute, to four minutes. Four minutes total each witness, in the interest of time.

First, Mr. William Norris, president-elect of the National Lake Management Society; Mr. Eric Draper, Campaigns Director of the Clean Water Action Project; and Mr. Ernest Shea, Executive Vice President for the National Association of Conservation Districts.

Mr. Norris, why don't you begin?

STATEMENT OF WILLIAM NORRIS, PRESIDENT ELECT, NORTH AMERICAN LAKE MANAGEMENT SOCIETY

Mr. NORRIS. Okay. Thank you, sir, for inviting NALMS to participate. It is the North American Lake Management Society, and I am the Government Affairs chairman and the President-elect.

I have been a watershed management official in the State of Virginia for eight years, and am currently employed as a water quality manager for the City of Norfolk.

Our testimony has been submitted to you, and I will just very briefly go through some of the items I think are important. I think from my experience as watershed management official, the lake and the reservoir is in fact a product or reflection of the activities in its watershed, and we cannot ignore it.

There is a difference in numbers that I have heard batted around today about nonpoint source impacts on water quality, the 305(b) reports, that for 1988 indicate that 85 percent of the remaining water quality problems in the country are attributable to nonpoint sources.

And nearly 45 percent of the nation's assessed lakes are impaired or threatened by pollution..

We need to return to designated uses and adherence to water quality standards. The problems that we have with our lakes and our water resources and reservoirs are attributable to more than just eutrophication.

In Kansas, for example, toxics have been identified as the impairment to all of their designated lake uses. In Massachusetts, we are losing $95.5 million per year in losses because of shellfish bed closures.

We have too many studies, I feel, sitting on the shelves, unused, too many programs and recommendations that are unused. We

have spent an awful lot of money to do programs in the past, and studies to look at lakes and reservoirs to determine what those problems are. Millions of dollars have been spent, and very few of those programs have actually been implemented.

The targeting of Federal monies needs to be the priority problems, and problems of significant National demonstration products, to let the public know that the problem—the nonpoint source problem—can be solved.

NALMS has been highly supportive of EPA, and EPA highly supportive of NALMS, but we feel that enforcement is lacking in the nonpoint source field.

We do not feel that EPA is being held accountable enough, and there is no mechanism in place for enforcing improvements in water quality that have been affected by nonpoint source pollution.

There is a problem with cross-compliance with Federal programs and conflict between these programs. For example, why spend millions of dollars to dredge to control flooding, when we ignore where that sediment came from to begin with?

We need a watershed-wide approach.

In Western Tennessee the taxpayers are paying $100 million to dredge the river there, but the farmers are also getting crop subsidies to grow more crops. There seems to be a slight conflict in where we are spending our money.

The other areas—some of the USDA programs are not a detriment to them, but we basically feel that they were not designed with enough water quality protection and improvement in place. There is an integration needed between those programs with existing agricultural and cost sharing programs.

I was involved with a program that we did do cost sharing on agricultural and highway resources integrated with the water quality management plan, and it does work. You have to take a little effort with it.

There is a failure to target resources for water quality infractions or exemptions, and the water quality laws need to be enforced.

I want to thank you. I notice my time is about up.

Senator BAUCUS. You have a few more seconds—better take advantage of them.

Mr. NORRIS. We would suggest and encourage full funding of 319 program, at $100 million per year for four years, as was budgeted. It appears to be adequate.

That would enable the initiation of stable state programs and would establish a national leadership that is needed.

Thank you.

Senator BAUCUS. Thank you, Mr. Norris.

Mr. Draper.

STATEMENT OF ERIC DRAPER, CAMPAIGNS DIRECTOR, CLEAN WATER ACTION PROJECT

Mr. DRAPER. Thank you, Mr. Chairman. Thank you for letting me appear here today.

I am not optimistic about the success of section 319, the nonpoint source management program. The amendments failed to establish

clear authority. EPA issue ineffective guidance. The States have reacted in an expected manner, sending EPA assessments and management plans that skirt the central issue of funding and controlling nonpoint source pollution to attain water quality goals.

Nonpoint sources cause half the nation's pollution in estuaries and 65 percent of the pollution in rivers and streams and three-fourths of the pollution in lakes, according to EPA's 1986 Water Quality Report to Congress.

The categories range from agriculture to urban storm water, and include air pollution, leaking dumps, septic tanks, underground tanks.

Water pollution from nonpoint sources is most widely distributed. It is rarely concentrated to such a point as to pass point sources on the priority rankings of State waters to be cleaned up.

When he vetoed the 1987 Clean Water Act amendments, President Reagan singled out section 319 for particular scorn. The president inadvertently got it right, and his words are worth repeating at this time.

> Controlling nonpoint source pollution has the potential to touch in the most intimate ways practically all of us citizens, whether farmers, businesspeople, or homeowners. And likewise, the control of it needs to go to those people.

To illustrate the point, two days ago a thunderstorm shower washed DC and its suburbs. The next day the city streets were clean, cleansed of pollution. But exhaust, bits of rubber, brake linings, grease, oil pan drippings, animal droppings, construction debris and garbage were washed from the city and its suburbs into the Potomac River and its tributaries.

The farm fields of Virginia and Maryland released tons of soils, fertilizers and herbicides. The Lorton dump released more contaminated leachate to mix with the acids washed from the abandoned West Virginia and Pennsylvania mines.

For the next few days, the Potomac River will be a mess. When Congress passed the Clean Water Act, the 1972 Clean Water Act declared the water quality goals for the Nation's waters, and called for an end to discharge of pollutants. Nonpoint sources were added in 1987 amendments.

With nonpoint pollution, there is no Exxon Valdez to unite public opinion and get agencies and businesses working together. There are just thousands of small fish kills and millions of sources of degrading water.

It is easier to identify and control point source polluters than to change the thousands of daily activities that contribute to nonpoint sources.

For the Clean Water Act does mandate that the States control water pollution and meet water quality standards, and EPA section 319 directs EPA to work with the States to develop management programs to control and reduce the sources and to obtain water quality goals.

Specifically, the law say to identify surface waters that will not attain water quality standards, to identify categories of pollution, determine best management practices, develop a process for control, identify State and local nonpoint programs.

The 1987 amendments also authorize a number of funding sources, including $400 million, four-year authorization for State grants and set-aside funds from Federal and municipal sewage treatment grants.

The authorized language could have been stronger. The law provides no mechanism beyond coordination for the States to enforce source controls. Section 319 is a program with no sticks, and, it now appears, no carrots.

The Clean Water Action and other groups have problems with EPA's approach, which sent an indirect message to the States the section 319 would be an also-ran Federal program.

EPA directs States to incorporate nonpoint source pollution management into their State clean water strategies. Well, that makes sense from a management point of view, at least, to continue focus on seriously impaired waters receiving point source discharges.

EPA established a set of recommendations to deal with the problem which feature public education and voluntary activity. Regulatory approaches were relegated to a backup position in EPA's nonpoint program.

EPA has yet to request an appropriation for section 319. The only specific request for nonpoint was $7 million contained in a request for water quality management grants for fiscal year 1990.

State assessment and management programs reflect confusion and inaction. An informal survey by Clean Water revealed that the nonpoint programs in most States are managed by low-level personnel. Assessments, where submitted, were typically collections of previously published documents, many of which were a list of waters.

State management plans are often descriptions of existing problems, such as soil conservation service.

To be fair, there are some good activities at the State level, and I will skip mentioning those, because I want to mention these details of what I think would make a good nonpoint plan.

Senator BAUCUS. Time is up.

Mr. DRAPER. Out of time, okay.

Senator BAUCUS. We have got your recommendations. We have got your written testimony, and we appreciate that.

Mr. DRAPER. Okay.

Senator CHAFEE. All right, Mr. Shea.

STATEMENT OF ERNEST SHEA, EXECUTIVE VICE PRESIDENT, NATIONAL ASSOCIATION OF CONSERVATION DISTRICTS

Mr. SHEA. Thank you very much, Senator.

My name is Ernie Shea, and I am the executive vice president of the National Association of Conservation Districts. We too appreciate the opportunity to testify today.

Conservation districts are local subdivisions of State government that are responsible for a wide range of natural resource management programs at the local level.

One of the priority activities that we have been involved with over the past 10 years is nonpoint source control.

As I think has been very well established thus far, we have come a long way toward addressing the goals of the Clean Water Act. We

have made good strides with the area of point source control, but in the area of nonpoint, unfortunately little progress has actually been achieved, and that is unfortunate.

Based on our experience on the local level, we think there are two major reasons for this. The first is lack of aggressive Federal leadership, and adequate guidance and assistance; and the second would be insufficient resources, and that is the primary problem that we have been struggling with for a number of years.

The nonpoint source pollution problem is a well-documented problem. EPA's water quality inventory reports do a good job of assessing the extent of the problem. It is the major cause of impairment for most of our stressed rivers, lakes and estuaries.

We know what causes nonpoint source pollution, and we have also come a long ways recently in developing new technologies to correct some of these problems.

Contrary to what many people believe, nonpoint source pollution is not an insurmountable problem—and that is a point I really want to emphasize. It is largely a people problem, and if everyone can work together cooperatively, modifying their activities and land use practices, we can make substantial progress.

In our judgement, the Water Quality Act of 1987 laid out a good national framework. Unfortunately, we have not done much to implement the framework that has been established.

With respect to the Environmental Protection Agency, we are pleased that they have recently begun to expand their nonpoint source activities. The agency's nonpoint source agenda for the future report that was released this Spring, we think, represents a good start. It sets out a good strategy.

Unfortunately, it took them just about two years to put that document together and get it out. We have got a tight time frame we are working on, under the 1987 Water Quality Act, and we need implementation more than just planning.

As a result of the slow pace at which they have been moving, we have been questioning how serious the agency really is about addressing nonpoint source pollution; and at this point, it seems to be a pretty low priority.

The bottom line, I think, is that while there is a lot of discussion and talk about doing something to control nonpoint source pollution, in reality, very little is actually being done.

We think that this is also one of the major reasons why States have been slow in responding. The 319 assessment reports and the management plans for the most part did not meet the deadlines. We have taken a preliminary look at the management plans and frankly have not been impressed with what we have seen.

We think they are quite thin, and I think the general attitude that States have is that why bother? If it is a low priority, and there is no money, there are plenty of other things to spend our time and scarce resources on, so we will move on to those activities.

We have also been somewhat critical of EPA and the manner in which they have handled public involvement and intra-agency coordination. I will skip over that, and just point out that we have covered that in our written testimony.

I guess I would also want to point out, too, that having thrown a few rocks at the Agency, we also think that they are making some

progress in this area, of late. They are starting to move forward. They have recently established a watershed assessment and protection division, within the Office of Water and we think we are beginning to see some movement.

This past April, our organization, with a number of other National groups, sponsored a National nonpoint source conference. We had over 500 Federal, State and local water quality managers in attendance.

Collectively, the group identified the fact that the lack of resources is the major obstacle which is preventing us from making major gains in controlling nonpoint polluting. It is the most significant impediment to implementation of the control strategies that we know can work.

State and locals are moving forward on their own, but what they need more than anything is support and assistance from the Federal Government. We are making very good progress at the State and local level in agricultural and in some urban, nonpoint source control areas.

Thirty-one States are now funding agricultural cost share programs. They are putting in approximately $100 million per year into these efforts. I think that is an indicator of what States are doing, so in our judgement, it is time for the Federal partner to proceed and move forward with nonpoint.

Thank you.

Senator CHAFEE. Thank you all very much.

I agree with what you said. You were here when I asked the questions of Ms. Hanmer about the amount of pollution that comes from nonpoint sources.

It is no excuse, but one of the problems we run into around here is the Federal Government threatening to get into land use planning, which I mentioned previously.

For instance, Mr. Draper, in your testimony on page 5, you tell us that this is what we should emphasize. Reduce agricultural pollution by controlling application of nutrients and pesticides.

Creating forested buffers between fields, streams and drainage areas, reducing livestock density and restricting locations that are given to rapid rainwater runoff.

Well, those are all worthy objectives, but I will tell you, if the Federal Government starts getting into reducing livestock density and restricting locations that are given to rapid rainwater runoff, none of us would be here, following an election, and I think what we have got to do is to try to encourage the locals to do more.

The points you have made are all good ones, and I am glad you focused our attention on the nonpoint source pollution.

Senator Lieberman.

Senator LIEBERMAN. Thank you, Senator Chafee.

I agree, these have been good witnesses. I appreciate the point Mr. Draper made, that this is—that nonpoint pollution is insidious.

It is not as dramatic as an oil spill. It is not even as visible obviously, as sewage pollution, for instance, or other visible events, but it happens as a result of a series of invisible actions that add up.

We find in Long Island Sound that recent studies have shown that 60 percent of our problem of nonpoint pollution there is from nonpoint sources.

Do you have any ideas specifically about what this committee or EPA might do to prevent nonpoint pollution, particularly in estuaries, like Long Island Sound?

Mr. DRAPER. Well, we can move forward under the current 319. The State of Connecticut and the State of New York, which have the rivers that flow under the Long Island Sound, could institute practices to control some of those sources that are going in there right now.

Many of the sources from Connecticut that you mention are not agricultural sources. They come from urban areas, and those are places that were the best management practices understood now could be instituted—it takes some degree of local and State political will, I think, to do that. But it has got to be done, to clean it up.

Senator LIEBERMAN. Air pollution is considered a nonpoint source, is it not?

Mr. DRAPER. Yes.

Senator LIEBERMAN. This was the good news, if we are able to successfully adopt clean air legislation this year, that we will have a positive effect on water quality as well.

Again, the recent studies have shown, much to my surprise, that as much as 25 percent of our pollution problem in Long Island Sound is from air pollution.

We know that most of the nonpoint pollution is carried by storm water. EPA recently issued regulations and set up some permitting guidelines for storm water released. I wonder what your reaction to those is. Have you had a chance to look at them?

Mr. DRAPER. Well, I think that as with the Section 319, that EPA just went as far away from doing what Congress intended as it could with the storm water guidelines. Our particular objection is the way that they categorize the—there is a scale of compliance with the largest, 250,000 service unit systems having to come in first.

I think that the way EPA identified that, instead of surface units, is to eliminate large suburban districts, large urban districts, because they are not hooked into the same municipal system, and I think EPA erred in that way.

I believe that natural resource defense council submitted comments on those regulations to that effect. The rest of the regulations, in terms of the recommendations that EPA has for how cities implement the law, I have not found a problem with, in terms of the practices they have to undertake to collect and treat the problems.

Senator LIEBERMAN. As time goes on, if you have any reactions to those, I would appreciate hearing from you on them.

Mr. DRAPER. Yes, sir.

Senator LIEBERMAN. Mr. Shea, I thought your commentary about the sort of chicken and egg or Catch-22 business with the 319 programs, where EPA seems to suggest that it is not a priority for funding since the States are not ready to use it, and the States have this feeling that EPA does not really care about the programs, so they are not working at it very effectively, was very well said and right on target.

Do you have a prescription for the problem?

Mr. SHEA. Resources—I think that is the answer.

I firmly believe that we have got good program mechanisms available to deliver nonpoint source technical assistance where it is needed at the local level, but what we have been lacking and still lack are the resources to fund those programs.

Senator LIEBERMAN. I believe I heard you say that the overall quality of the State plans submitted this year was lacking? It was not what it should be, is that correct?

Mr. SHEA. That was our assessment. We have taken a preliminary look at perhaps 20 of the State management plans that have come in.

Many of the States only addressed individual components of the total nonpoint source load. For instance, they only covered agriculture, or perhaps an urban component. It is a very comprehensive problem.

Senator LIEBERMAN. Your feeling would be that if there was more Federal money involved, the quality of those programs would pick up?

Mr. SHEA. Absolutely.

Senator LIEBERMAN. Thank you.

Senator CHAFEE. Thank you, Senator.

Let me just say this: that I think you folks are on the right track, obviously. As the statistics have shown, you are dealing with the area that is the highest percentage of the pollution.

I think that there is some hope, both as Senator Lieberman mentioned in connection with the Clean Air Act, where we deal with air pollutants, and in the Clean Water Act. As you know, we have the demonstration project for the estuaries, which deals with a far broader agenda than solely the quality of the water. It is what is the effect of the buildup along the side of the estuary, and I think these points you have made are all good. Replacing use of salts in road deicing, for example.

I do think that one of the principal areas where you can be effective is to put as much thrust as you can on the local level with the States, and I am sure you are doing that.

For Big Brother in Washington to try and do too many of these obviously gets everybody's back up. We can do more with resources, but we—as we discovered when we did this Act in 1986, we have limitations, as you know, we put the provision in there dealing with nonpoint sources. We were not even able to get in a provision that there were sanctions if they did not come up with a plan.

So the plan is really optional on the States' part. But I commend you for what you are doing, and hope you not only keep after us, but keep after your State legislatures and governors and counties as well, because there they can see what is happening to the deterioration of a lake.

Mr. Shea, didn't you show what has taken place in some States?

Mr. SHEA. In the agricultural area, there are quite a few States that have implemented cost sharing programs, because they recognize that the way you solve the agricultural nonpoint problem is to work generally cooperatively with farmers providing technical assistance, in some cases financial incentives, education—and you back it up with a regulatory mechanism of some sort. There needs to be that.

But State and local is the key to solving nonpoint problems.

Senator CHAFEE. Good.

Thank you all very much for coming.

The next panel consists of Mr. Alan Beals, Executive Director of the National League of Cities, who is here in lieu of Burt Stallwood, who is the mayor of Lincoln, Rhode Island; Mrs. Roberta Savage, Executive Director, Association of State and Interstate Water Pollution Control Administrators; and Mr. Jack Fickessen, from the Texas Water Control Board.

We will take them in order listed here. Mr. Beals, why don't you proceed?

STATEMENT OF ALAN BEALS, EXECUTIVE DIRECTOR, NATIONAL LEAGUE OF CITIES

Mr. BEALS. Thank you, Mr. Chairman.

I am Alan Beals, the Executive Director of the National League of Cities. And unfortunately, the weather has made it impossible for the witness, the chairman of our Energy and Environment committee, to be here today, so I will testify in his place.

The National League of Cities represents some 16,000 cities and towns across the Nation. We are vitally concerned about future financing for water pollution control needs.

We now know beyond any doubt that the Federal Government has the resources to provide financial assistance to State and local governments in meeting the Federal mandate for secondary treatment.

Shortly, we expect the President to sign legislation obligating the Nation's taxpayers to spend over $200 billion to bail out the nation's savings and loan industry.

That is payment for past fraud, abuse and failure, it is not an investment in the future.

We at the local level are very aware of the Federal deficit and its impact on decisions made here in the Nation's capital. We, perhaps more than anyone else, have felt the effects of the Federal Government's attempts to reduce spending and get the deficit under control.

Our recommendations reflect our awareness of the difficult deficit problems with which you and the Congress are trying to grapple. We believe there are five guidelines that the Federal Government should address to ensure that cities and towns are able to deal effectively with this and other mandated programs.

First, there should be consistency in honoring legislated commitments.

Second, there should be State matching requirements.

Third, water pollution control needs beyond waste water should be recognized.

Fourth, the recognition of the fiscal capacity, or lack thereof, of local governments to comply with unfunded Federal mandates.

Fifth, equitable tax policies.

Let me address just a couple of these.

First, consistency in honoring legislative commitments. Capital financing and securing revenue streams to pay off bondholders requires consistency of funding sources. This is especially the case in

long-term, sophisticated infrastructure projects, such as waste water treatment facilities.

Ever-changing Federal commitments and appropriations wreak havoc with the stability necessary to ensure the needed financial commitments to infrastructure programs.

When Congress, under the leadership of this committee, approved the 1987 Clean Water Act amendments, we were promised $2.4 billion annually through 1991 with a gradual phase-out of Federal financial participation beginning thereafter, ending in 1994.

By that time, the seed money provided to the State revolving funds was supposed to have been adequate to ensure a continuing supply of funds to meet the Nation's waste water treatment needs.

As you well know, funding for the program was cut by slightly over $40 million in fiscal year 1988, and by $450 million in fiscal year 1989.

Now, the Administration is seeking to cut the program by 50 percent below authorized levels, or by $1.2 billion for fiscal year 1990.

Obviously, it is impossible to plan at either the State or local level if we never know what resources will be available to us.

On the other hand, the savings and loan bailout, all the capital comes up front—not subject to annual budget, authorizations, appropriations, and Gramm-Rudman considerations over any of the next 30 years.

Secondly, water pollution control mandates beyond waste water. Cities and towns in this country are very concerned that we are only looking at a portion of the program, that what is yet to come—and what they fear—are programs to control pollution from storm water runoff.

We know that municipalities with combined systems face potential costs in excess of $100 billion over the next several years to address control of pollution from storm events, and this does not account for what has already been spent by local governments with local tax dollars in addressing the problem.

Thirdly, mandates. Just as the Federal Government is recognizing that given the deficit, it can no longer function as it did in the past, so too must the Federal Government recognize that it cannot issue unfunded mandates the way it issued those for which it was willing to pay.

And lastly, equitable tax policies. Capital investments at the State and local level have been and are funded largely through the use of municipal bonds. The tax code has been revised no less than six times in the last eight years, and every time the tax code is reformed, the ability of State and local governments to meet the infrastructure needs of our nation have been further curtailed.

The first year and second year after the 1986 Act, financing of hard-core infrastructure has declined 50 percent per year.

The Congress is making another run at us currently. The Ways and Means committee is currently marking up the Rostenkowski Tax bill, marked it up last week with Administration support, that will increase the costs for waste water treatment facilities, especially for small communities.

Now, last year, had it not been for the successful efforts of Senator Bentsen and Senator Chafee, Congress would have, in effect, wiped out the State revolving fund before it even began.

I simply want to urge the members to explore more carefully the full ramifications of your tax code changes before you charge on ahead.

Thank you very much.

Senator BAUCUS. Thank you very much, Mr. Beals.

Next, Ms. Roberta Savage.

STATEMENT OF ROBERTA SAVAGE, EXECUTIVE DIRECTOR, ASSOCIATION OF STATE AND INTERSTATE WATER POLLUTION CONTROL ADMINISTRATORS

Ms. SAVAGE. Thank you, Mr. Chairman.

I represent the Association of State and Interstate Water Pollution Control Administrators—simply put, the State agencies that have been the focus of every panelist to appear before you today.

I want to take you back in history, back to 1981, where President Reagan and particularly Mr. Stockman told all of us that reforms needed to be put in place before money would be available for this program.

Those reforms were put into place by this committee, and by the Congress. And then they came back to tell us that—in meetings that I was in with Mr. Stockman—that he intended to kill this program by the time that President Reagan was out of office, and they made a good run at it, as Mr. Beals indicated.

And OMB still holds that view today, that this is not a high priority program. We were faced with one of two options—either a new form of financing for waste water treatment, or an old, dead program.

So Congress worked with the States and with local governments, and particularly Mr. Chafee, we want to thank you for your leadership in including the States in those discussions of conference committee, to come up with a program that we thought would work, and that could cover the cost of the program.

In doing that, there was a covenant between the Congress and the State and local governments. The State and local governments accepted $83 billion worth of waste water treatment needs in exchange for an $18 billion commitment from the Congress over a nine-year period.

In accepting that, we were promised sole management authority for the program after 1994, flexibility for the States to manage their programs consistent with the political and economic structure of their State, and minimal Federal requirements.

The State experiences so far with this program have been mixed, but less than auspicious in several instances. First there was the letter of credit, which instead of providing the funds to State and local governments, as promised by the Congress, gave us a reimbursement program. Local governments must incur costs before funds are made available.

Then there was the tax law implication that inhibited leveraging and bonding opportunities.

Then we went through some hassles with the agency on the development of regulations and guidance. And to give credit to the Office of Water, they were dealing with a complex and cumbersome internal bureaucratic system. We found that people in the Office of

Air, for example, had equal weight with the State and local governments in commenting when in fact it was not a program that they even dealt with.

And then, of course, we have the Administration coming with a request of less than 40 percent of the authorized amount. It was observed by Congressman Boland in an interview I did with him just before he retired that "it seems that this is a trail of broken promises."

Even so, the States have been active in pursuit of their State revolving loan funds, and as Ms. Hanmer indicated, 24 currently are approved and we are expecting 40 by the end of September.

We would like to see the Congress examine very closely the cross-cutting issues that Ms. Hanmer mentioned this morning. Some of those Mr. Chafee outlines, Davis-Bacon, drug-free environment, historic preservation, minority business enterprise—these are social goals that we are placing on local governments that may or may not be appropriate, and they certainly do increase the cost of administration for local governments.

We would like to see you tie the 4 percent for program administration to the authorized level, rather than linking it to appropriations and the capitalization grant. If it remains 4 percent of the appropriated amount and there is no appropriation, four percent of zero is still zero.

Of course we would like you to push for full funding. We would like you to direct EPA to clarify language on the Governors' discretionary fund of 20 percent. Once enforceable needs are met, States should be able to use their funds for nonpoint sources, for estuaries programs, for wetlands protections, Combined Sewer Overflows, or whatever category authorized under the law. There seems to be some confusion at EPA as to whether or not we can go ahead and do this.

And then, provide for land easements. I will supplement my testimony with other information on storm water and some other areas of interest to the States.

I would like to answer a question you posed to Ms. Hanmer earlier today—at least by our calculations. If $2.4 billion was appropriated between 1987 and 1994, as intended by the Congress, over a 20 year period of all the States participating in the program, we estimate with inflation we would have only addressed $30 billion of the $83 billion needs — and of course the President's budget is a disaster to our ability to meet those core needs.

Last, I would like to thank Mr. Chafee for his leadership in the development of the authorized language that we have today, and also thank you for your willingness to work with us on our project, America's Clean Water, to commemorate the 20th anniversary of the Clean Water Act in October of 1992.

Thank you.

Senator BAUCUS. Thank you, Ms. Savage.

Mr. Fickessen.

STATEMENT OF JACK FICKESSEN, TEXAS WATER DEVELOPMENT BOARD

Mr. FICKESSEN. Mr. Chairman, members, my name is Jack Fickessen. I am here wearing two hats today.

I am the assistant administrator of the Texas Water Development Board in Austin, and I am acting chairman of the Council of Infrastructure Financing Authorities.

On behalf of both the Board and the Authority, I appreciate your having us here.

As a footnote, the Water Development Board was one of the first or second State agencies to implement the State revolving loan fund. Thus far, we have capitalized the fund over $230 million and have out on the street in loans $130 million of that capitalization amount.

We probably plan to put an additional $80 million in this year of State funds, which will put us up over $300 million.

Overall, we are excited about the State revolving loan fund, both as an agency, and I think as the council. We do not believe that a categorical grant program is the answer in this country to solve pollution control programs, because it does not address the long-term needs of pollution. It is a one-time shot only.

I would go along with the two previous panelists. There are basically five points on the State revolving loan fund that I think the Congress needs to seriously look at, two of which have been addressed. That is the appropriation, the $18 billion needs to be fully funded for this program to be a success.

The second is a look at the letter of credit to see whether or not that is a viable instrument as to capitalizing these programs. And I would like to diverge off of that a little bit to I think address Mr. Baucus and Mr. Chafee's concerns over what the heck do we do with small communities?

Gentlemen, we had a problem with small communities in the construction grants program, when even at 75 percent previous to 1981, small cities or rural cities or economically distressed communities could not afford to participate at 75 percent grant.

We went to 55 percent in 1981. That became even more onerous. We are now only able to assist with at best a zero percent loan paid back over 20 years.

It is estimated that there is somewhere in the neighborhood of $750 million worth of need for economically distressed communities in Texas and I am sorry that I do not have a national figure for you at this time. In addition, we have many small communities that will not be able to participate.

Some suggestions along those lines for the small communities would be to think seriously about a grant program—and I just told you that we were against grants.

But you can do a grant program internally inside the State revolving loan fund providing that you protect the corpus or the integrity of the corpus of that particular fund. In other words, allow the administrator of the fund to make grants to the ability to where the capitalization dollar amount will not be impeded.

That means that somebody has got to subsidize it, where the people that we used to subsidize that—and we do it now—are the

larger communities, where they get the economy of scale and have the ability to repay. We are using those folks 'money to make zero interest or lower interest loans. In other words, we have a variable interest rate program.

Another thing that you might want to look at is extending the 20 year period for payback. Now, while that makes a total project more expensive, it allows the debt service on an annualized basis or a monthly basis to be reduced, and gets back into the realm of affordability.

The Tax Code was mentioned. The senior Democratic senator from Texas, who is also the chairman of the Senate Finance Committee has our heartfelt thanks. He was, along with Senator Chafee, very much involved with saving the State revolving loan fund when the hedge blind pools were being discussed during the fall, the last session. Thank goodness we are able to continue to work with hedge blind pools as the SRF is.

And something else that you might want to consider in the ways of taxes. Right now, small communities or communities have a cap both as to what banks can purchase in the way of municipal tax exempt bonds, and what the rebate arbitrage cap is. Those are both set not to exceed $5 million a year. You might consider, or the Congress might look at, raising that cap.

Another point that you might want to—and this may be a little bit radical—depends on how you pay for debt service in the community. If the community pays with taxes, those taxes are deductible on an individual's income tax.

If the community pays with revenues, the individual does not have an opportunity to take that off his tax return. You might want to consider looking at the Federal income tax code to maybe do a tax credit for debt service on infrastructure where revenue bonds are used in small communities.

I am sorry that I have exceeded my time. My statement has some other information in it that may be of benefit to the committee.

Thank you for having us here today.

Senator BAUCUS. Thank you very much, Mr. Fickessen.

I would like to ask each of the two of you, what about the other one's ideas? Particularly the grants to small communities—what is your reaction to that?

Mr. BEALS. I would concur with many of his suggestions, particularly in small communities. As you know, one of these projects may be the only major public works program that they undertake in many, many years, and the thought of the payback being limited to 20 years, I think, is one that needs some review.

Thirty years, or some longer time period, I think, would go a long way toward assisting some of the needs of the smaller communities.

Senator BAUCUS. Do you think the larger communities would go along with that, those in your membership?

Mr. BEALS. Well, they would like the longer period too, because there are some big, large programs that are facing several major cities.

Senator BAUCUS. The question is, would they go along with essentially subsidizing some of the smaller communities?

Mr. BEALS. I think that would be worth examining. It has not been an issue that has been discussed within our policy committee, but we would be happy to take a look at it, and give you some judgement on it.

Senator BAUCUS. It seems to me that what he says has a lot of merit to me. There are not many other alternatives.

It is true that smaller communities just do not have the resources. There is virtually no other way to get the job done.

They will need some outside assistance somehow, some way.

Mr. BEALS. Well, I go back to the point that I made in my statement, which is that the tax code, the way the Rostenkowski tax bill is being marked up now hurts small communities.

There are a lot of things that can be done if we are looking at the tax code from the standpoint of achieving these kinds of public policy concerns, that are very counterproductive.

Senator BAUCUS. What is happening over there that hurt small communities?

Mr. BEALS. There is a proposal HR 1761, that has been approved and supported by the Administration.

Senator BAUCUS. What is it?

Mr. BEALS. It is legislation to modify the alternative corporate minimum tax, or the Federal tax on adjusted current earnings. It would subject the interest on general obligation and revenue bonds to full Federal taxation, thus imposing a significant disincentive on their purchase. It is going to make it more expensive for smaller communities, especially, to do public works financing, particularly in the areas of waste water and other infrastructure.

Senator BAUCUS. Ms. Savage, do you have any reactions to Mr. Fickessen's ideas in smaller communities?

Ms. SAVAGE. A couple of them. I remember the bill that Senator Rockefeller introduced not long ago, to extend the municipal compliance deadline for small communities because they did not have the money to build necessary systems. Of course this is very troubling for us, because we worked very hard with EPA on the municipal enforcement strategy and getting small communities, all communities into compliance by July 1, 1988.

So, it is troubling from an environmental perspective to look at extending compliance and not meeting the requirements for small communities. On the other side of the coin, of course, we know that some communities do not have the adequate roads, schools, fire departments, and then we come in and tell them that they have to build a big sewage treatment plant.

Senator BAUCUS. Yes, so what about the basic question, though, of larger communities lending a hand to smaller communities?

Ms. SAVAGE. It makes tremendous sense to me, and I would like to have some time to look over Jack's proposal as far as a grant within the corpus of the SRF program.

I do not know how the 50 States would respond to that, or if the State legislatures, many of them, would probably have to go back through their State legislative process to get it changed to allow for that.

So, I would want to spend some time with the States and ask them how they would respond.

Senator BAUCUS. I encourage you to do that, if you would, please. I represent a State with many small communities, and I can tell you that it is a major problem.

Ms. SAVAGE. Absolutely.

Senator BAUCUS. I have no more questions.

Senator Chafee.

Senator CHAFEE. Thank you, Mr. Chairman.

I just want to briefly ask on the letter of credit, the objections. Are not the principal objections that you lose the float? In other words, you lose the interest pending the payment, it is nice for you to get that, but I have trouble finding the letter of credit arrangement is that grossly unfair.

Could you respond to that?

Mr. FICKESSEN. Sir, there are three things that I think probably you can talk about. One is that we do lose the float, and $18 billion was the capitalization amount on an $80 billion program.

That $2.4 billion a year will not even cover construction inflation on an annualized basis. I think some of us were thinking four years ago when this was being discussed that that float would help the $18 billion—really looking at $25 billion or $28 billion into this program.

The additional administration cost involved with processing and construction payments on a monthly basis, asking for reimbursement, going through the Federal Reserve, drawing this money down, it adds an administrative burden not only to us, but also to the borrower.

And they also lose on the float, where their construction cost could be reduced if they had cash in hand upon closing the loan. So there are several things involved in the letter of credit, sir.

Ms. SAVAGE. In addition, Mr. Chafee, the opportunity for leveraging, which a number of States, Connecticut being one of them, had an elaborate program for leveraging the base SRF.

When the letter of credit, complicated by the Tax Act— most States, in fact I am not aware of any States right now that are proceeding with their leveraging program because of the letter of credit mixed with the tax law provisions.

Senator CHAFEE. The next question I would like to ask all three of you.

You talked about the cross-cutting requirements, the strings, the requirements to the Federal Government, be it a drug-free workplace, Buy America, Davis-Bacon. I am interested in that.

Do you have any definite evidence of increased cost that might come from, say, Davis-Bacon?

Ms. SAVAGE. Yes, sir, specifically in the State of Utah, where the requirements for Davis-Bacon, the level of salary in the State of Utah does not even meet the base requirements for Davis-Bacon.

So when you put that, you apply Davis-Bacon to the State of Utah, the entire program costs go up for administration. They were one of the first States to come into the program. I would suspect smaller States like the Chairman's State would also have problems in that particular area.

Senator CHAFEE. Well, I would be interested if you could submit to me any documentation on that.

How about you, Mr. Fickessen?

Mr. FICKESSEN. Sir, I do not have a real cause on the cross-cutting legislative issue.

Senator CHAFEE. I do not think we are going to change drug-free workplace and things like that. But I was just curious on any specifics on Davis-Bacon, for example?

Mr. FICKESSEN. Yes, sir, we do have some numbers.

Senator CHAFEE. Why don't you send those along, could you?

Mr. FICKESSEN. I certainly will.

One other point, though, along those lines that I did not talk about, but it is in my written testimony——

Senator CHAFEE. Also, I was surprised that Buy America applies in here. I have got to check on that.

Are you sure of that, Ms. Savage?

Ms. SAVAGE. Not positive, but it is my understanding.

It does not?

Senator CHAFEE. I do not——

Ms. SAVAGE. Okay.

Senator CHAFEE. I know it has come up in transportation matters that we have dealt with here.

Ms. SAVAGE. Historic preservation is also another area that is causing a tremendous amount of turmoil for the States, because they have to do these assessments before you can even begin to proceed with the program.

Senator CHAFEE. Well, I have never known how historic preservation gets into sewage plants.

Ms. SAVAGE. Neither did we. We have learned a lot with these cross-cutters.

Senator CHAFEE. Well, let's take a look at that one, too. If you could send that information on Davis-Bacon, I would appreciate it.

Thank you, Mr. Chairman.

Senator BAUCUS. Thank you.

Senator Lieberman.

Senator LIEBERMAN. Thank you, Mr. Chairman.

Just for a moment, back to the letters of credit.

I had understood that the letters of credit might be causing some administrative problems for folks at the State and local level in causing delays in moving projects forward—am I wrong?

Is that not a problem for you through the letters of credit?

Ms. SAVAGE. It is a definite problem, and to correct it now might be a problem as well, because a number of States are working under the process.

Senator LIEBERMAN. Why does it create the delay? Just explain it to me a little bit.

Ms. SAVAGE. As I understand it—the original philosophy was that local governments would get the funds up front and be able to build their program and go forward.

The way it is now, local governments must incur the cost, submit their bills to the State, the State reviews them and approves them, then they send it to EPA. Then EPA approves it, and it goes to the letter of credit office, and there is an electronic transfer, and then it comes back down through the chain and finally goes to the local government.

That is a lot of paperwork.

Senator LIEBERMAN. Yes. What are we talking about—weeks, or months, in that?

Mr. FICKESSEN. No, sir, the actual transfer of cash, once we receive the bill and approve the bill for payment only takes a matter of days.

Senator LIEBERMAN. I understand that, but I mean the whole process?

Mr. FICKESSEN. The whole process takes about two months.

Senator LIEBERMAN. A couple of months.

Let me ask this underlying question. Obviously we are dealing here with an enormous need for capital, which unfortunately has been affected by things Congress has done—the change from grants to the revolving fund to letters of credit, the tax changes that I had dealt with when I was Attorney General, which had been horrendous.

I think I can still get away by prefacing my question by saying that I am new here. I do not know how long—what the house rules are for how long I can continue to do that.

But my question is this. At least in Connecticut, I have the sense that this is really one of the priority concerns of the State, both in terms of impact of clean water and quality of life and the cost to public entities.

Underlying here, this is a political problem. This is a problem of fighting for limited resources, or making the case to expand the pie, the resources.

Do you feel that State and local governments are sufficiently mobilizing their political capital here in Congress to convince us that this is a top priority? Again, I have not been through the earlier battles, so I do not know how much was done.

But what I see is the result, and the result seems to me to be a continuous shrinking of what is available to meet this need.

Ms. SAVAGE. Absolutely, and in fact, when we get to 1991 and 1992, where the grant monies go away, it will be even more exacerbated, because we currently have the set aside funds to manage these programs under the construction grants program, these will be eliminated.

Rebecca spoke this morning about the State funding study that we have just completed with her, and I would like to provide that to the committee, because it shows the tremendous need that we are going to have in the future that will be unmet as soon as the grants program goes away.

The answer to your question is no, we are not doing enough. We try, but State and local governments are so overburdened with the day-to-day work that to come in to lobby you takes time and money. The reason I am here instead of a State is because they are either on travel bans or the travel funds are cut and they cannot get out of State.

So it is—we would like to do more.

Senator LIEBERMAN. Mr. Beals, what do you think?

Mr. BEALS. Senator, this issue—waste water treatment—has been a priority of the National League of Cities since 1956.

It is a concern of all of our 16,000 members throughout the country. It has consistently received our top attention. As has been pointed out, we are suffering because of the lack of resources and

the long term ability to really get on top of and solve this problem, I think, is very constrained and limited as a result.

Senator LIEBERMAN. Why do you think Congress has been pulling back instead of responding? I mean, if it is one of your priorities, why haven't the results in recent years been better?

Mr. BEALS. There have been a lot of big forces lined up against us. You know, the Gramm-Rudman process here in the Congress, the Administration's efforts to remake the program, the influence of the tax writing committees—they do not hold public hearings on these kinds of issues, at least on the House side.

As a result of the combination of these forces, it is very difficult to mobilize the kind of political support and to keep it focused on all of the complex aspects of this problem.

Senator LIEBERMAN. Well, I urge you to hang in there, because it is obvious this is not a partisan problem. I am sure there are local and State Republican officials who are as concerned about it as Democrats, and vice versa.

Ms. SAVAGE. Can I answer that?

There is a unique effort underway right now, working with Senator Mikulski chairman of HUD independent appropriations subcommittee. We have been mobilizing groups underneath the HUD and IA appropriation, which includes NASA, housing interests, the veterans and the environmental community. Our association is taking the lead with the Isaac Walton League on the environmental side in an attempt to bring more money into the base subcommittee appropriation under the 302(b) allocation.

The idea is that if we get more money into the appropriations process, we will not be fighting directly against space interests, specifically space station. With the funding of space station last year environment was the loser.

We did not want this battle to occur again, and so we have been all working together. It has been quite an interesting arrangement to have the NASA, the housing community, the environmental interests and the veterans all going to see Members of Congress together.

Senator BAUCUS. Good for you. Good luck.

Ms. SAVAGE. We hope it works.

Senator BAUCUS. I thank you all very much.

One of the advantages you have as the last panel is to comment on any point anyone else made that was so outrageous that it deserves a response.

Do any of you have anything you want to say before you leave?

Ms. SAVAGE. Thank you for your patience.

Senator BAUCUS. I thank the panel.

[Whereupon, at 12:41 p.m., the subcommittee was adjourned, to reconvene at the call of the Chair.]

[Statements submitted for the record follow:]

STATEMENT OF
REBECCA HANMER
ACTING ASSISTANT ADMINISTRATOR FOR WATER
U.S. ENVIRONMENTAL PROTECTION AGENCY
BEFORE THE
SUBCOMMITTEE ON ENVIRONMENTAL PROTECTION
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
U.S. SENATE

June 16, 1989

Good morning Mr. Chairman and members of the Subcommittee. I appreciate the opportunity to appear today to discuss the Environmental Protection Agency's (EPA's) experience to date in implementing key aspects of the Water Quality Act of 1987. This Act made numerous changes and improvements to the Clean Water Act (CWA) and presented a large and important challenge to EPA and to the states to continue our progress in improving waters and protecting the environment. While there is much more to be done, we believe that EPA and the State water quality agencies have responded strongly over the past two years. My statement does not cover all aspects of the 1987 Act but focuses on progress to date on establishing State Revolving Loan Funds, control of toxic discharges, permitting programs to control pollution from contaminated stormwater, nonpoint source management programs, and sewage sludge.

Water Quality Act Directions

From EPA's perspective, the important initiatives are based on three fundamental directions found in the Water Quality Act. First, we are shifting responsibility for funding municipal

wastewater treatment systems away from federal grant programs and to State and local funding. The beginnings of this shift were found in the 1981 Clean Water Act amendments in which Congress decided to reduce the Federal share of the construction grants program and limit the types of construction eligible for Federal support.

Secondly, the Water Quality Act, while supporting the existing Clean Water Act regulatory structure as an appropriate framework for controlling point sources of water pollution, also strengthened and to some extent redirected our efforts to focus on regulating toxic pollutants in surface waters, industry and municipal effluents, domestic sewage, sludge, and stormwater.

Finally, the 1987 Act reinforced the emphasis on State responsibility in many regulatory and water management areas. The Water Quality Act clearly assigns States the lead for nonpoint source pollution by requiring State assessments and management programs. EPA has a national guidance and leadership role, but little direct authority in this area. Similarly, the Act recognizes State responsibility for controlling toxic discharges with the States having primary responsibility for adopting standards, identifying impaired waters, and regulating discharges. In this area, however, EPA has authority to step in where necessary to take direct action to regulate toxics.

EPA's Implementation Strategy

In our implementation efforts, EPA has followed certain basic principles. One was to provide the States flexibility where this was consistent with the statute. For example, to facilitate the transition to State Revolving Loan Funds (SRFs) we made requirements for creating SRFs as flexible as possible under the law. We emphasized the flexibility the States have to select the types of wastewater projects they could fund and we emphasized the States' ability to structure their loan programs to fund nonpoint source control and other eligible activities. Another principle was to build as much as possible on the existing implementation framework. In addressing the point source program changes especially, we built on existing activities, rather than setting up competing or overlapping requirements. This philosophy has especially affected our choices in implementing the impaired waters listing program and Individual Control Strategy development process, under Section 304(l).

Finally, we emphasized, in both the point and nonpoint source control programs, that EPA and the States needed to move rapidly to deal with known problems, rather than launch new scientific efforts. Concomitantly, we emphasized making the best possible use of available information not only in our data systems but reaching out for other Federal and State agency information that might be relevant.

State Revolving Fund

The 1987 Water Quality Act phases out the Federal construction grants program and replaces it with a new State Revolving Fund (SRF) program. Under the SRF, EPA is authorized to award grants directly to States until FY 1994 to help them capitalize State water pollution control revolving funds. SRFs may provide loans and other forms of assistance, but not grants, for the construction of municipal wastewater treatment works. In addition, SRFs have broader authority to provide financial assistance for the implementation of State nonpoint source pollution control management programs and the development and implementation of estuary conservation and management plans.

SRFs are intended to become a permanent source of funding for the States with original federal and State monies deposited in these funds being loaned out and the repayments from these loans being used to finance additional loans in the future.

In January of last year, the Office of Water issued the principal document implementing the SRF program, the "Initial Guidance for State Revolving Funds." We are now accepting comments on draft regulations which describe the basic requirements of the program and reinforce the directions set forth in the initial guidance.

To date, EPA has made SRF capitalization grants to 24 States, representing a Federal commitment of over $700 million. We expect to award grants to another sixteen States before the

end of the current fiscal year -- bringing the total to forty States.

We believe that the implementation of the SRF program has largely been successful. Over half of the States are already into the program; three-fourths are expected to get EPA approval of their programs by the end of the fiscal year. The major issues which arose as we implemented the program relate to SRF payments, cross-cutting Federal laws and authorities, and the applicability of SRFs to the Territories.

With regard to payments, the law requires that Federal payments be made within two years of each capitalization grant. If EPA were to have made these payments in cash, it would have drastically accelerated cash flow the States and resulted in approximately $3 billion more in Federal outlays to the States over the first five years of the program, as compared to traditional construction grant payout rates. In the context of Federal budgetary constraints, EPA developed a process of making payments to the States through letters of credit. The entire amount of the capitalization grant is made available to the States within the two years provided by the law, but cash is provided only when needed to pay for construction costs as they are incurred.

Another major issue is the existence of over twenty cross-cutting Federal laws and authorities that impose requirements on the SRF program that go beyond the Clean Water Act. A number of other Federal statutes, executive orders, and Federal agency

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directives are also applicable to any program providing Federal grants or other Federal financial assistance. Title VI does not explicitly preclude the application of these other Federal authorities and we have applied them to projects funded from EPA's capitalization grants. In the construction grants program, EPA and other Federal agencies have been extensively involved in monitoring and ensuring compliance. In keeping with the spirit of the statute to increase State flexibility and to limit the role of the Federal government, we have attempted to work out compliance procedures for handling other Federal requirements beyond the Clean Water Act that minimize the burden to the States.

A third issue relates to the applicability of the SRF program to small Territorial governments which receive allotments under this program. The size and organizational structures of these governments may make it difficult or impractical for them to implement successful programs. In some cases sub-Territorial governmental structures are not in place to receive loans, resulting in the need for Territorial governments to make loans to themselves.

Finally, EPA and the States have concerns about the ability of small communities to repay their loans -- even at no or very low interest rates. Recognizing the special needs of small communities, we have expanded our outreach program. This effort is targeting information and technical assistance for small

communities on low cost technologies, financing options, and financial management approaches.

State Program Funding

The change from grant to loan funding will provide a long-term approach to meeting wastewater construction needs. However, a byproduct of this change leaves states with funding difficulties for their own water quality programs. This could result in serious erosion of their base programs as well as their ability to carry out new responsibilities unless the funding gap is addressed by State efforts to develop alternative revenues. State funding needs are increasing partly due to expanded responsibilities under the federal Water Quality Act and this is compounded by the demands on the States also to increase their efforts under the 1986 Safe Drinking Water Act amendments.

To help States respond to this challenge, EPA has conducted a State Funding Study in cooperation with States and State water quality organizations. The study has: (1) quantified State water quality management needs, (2) identified and initiated actions to support and stimulate State use of supplemental financing mechanisms such as new or increased fees for service, (3) examined the criteria for Federal support of State water programs, and (4) worked to strengthen our partnership with the States and interest groups to implement the recommendations of the Study. We have just completed this Study and are examining implementation options.

Controlling Toxic Discharges

The 1987 Amendments underscored national concern about water pollution problems caused by toxic pollutants. Despite significant progress by EPA and the States in achieving point source controls, surface water contamination by toxic pollutants remains a concern in many areas.

The Water Quality Act responded to this challenge by adding new requirements with very tight deadlines for EPA and States to take action in controlling certain toxic discharges to surface waters. One such requirement, Section 304(1) of the Clean Water Act, requires States to develop lists of specific impaired waters, including a special list of waters polluted by the priority toxic pollutants, and the dischargers responsible for discharging these pollutants. EPA and States were also required to establish individual control strategies for these dischargers. States were to complete this work by February 4, 1989, and EPA was to approve or disapprove the State actions by June 4, 1989.

The Amendments also added Section 303(c)(2) which requires States, as part of their triennial water quality standard reviews, to adopt criteria for the same priority toxic pollutants, where necessary to protect designated beneficial water uses.

In March 1988, EPA issued guidance to the States on implementation of the Section 304(1) requirements. In January 1989, we codified the statutory requirements of Section 304(1) into EPA's existing permitting regulations. Most recently, on

May 26, 1989, we promulgated regulations which establish the full implementation program for Section 304(l) and the EPA criteria for reviewing State actions under Section 304(l). Under our regulations, Section 402 NPDES permits serve as the mechanism for developing and enforcing the individual control strategies.

In implementing Section 304(l), we have tried to maintain EPA and State efforts to address all pollutants causing toxicity in receiving waters, not just the toxic pollutants specified in the statute. In doing this, we have emphasized the Clean Water Act's general direction to maintain surface waters free of toxicity. This approach is also useful where States have not yet established numeric criteria for the priority pollutants, since all State standards include a narrative prohibition of the discharge of toxics in toxic amounts.

I am pleased to say that the majority of States met the Section 304(l) deadlines for submitting lists of waters and control strategies to EPA. Furthermore, EPA has already acted on fifty-five of the State submissions and expects to complete action on the remaining States this summer. The implementation of requirements under Section 304(l) will, in the near term, result in more stringent controls on toxic pollutants for 879 sources nationwide that are currently impairing 595 water segments.

To assure that State water quality standards will protect against receiving water toxicity due to priority pollutants, we have also made much progress implementing the requirements for

State adoption of numerical criteria as part of their water quality standards. In December 1988, EPA issued final guidance for State adoption of water quality standards as required by Section 303(c)(2)(B). We have encouraged States to use the scientific information in EPA's water quality criteria guidance documents for the specific pollutants in question, but they retain flexibility to use other scientific information to set site-specific criteria where appropriate.

EPA is also working with States to assure they are able to address adequately other pollutants through their standards program. In this regard, we have focussed on implementation procedures for the narrative "free from toxicity" standards which potentially cover all toxic pollutants whether or not designated as "priority" pollutants under the Clean Water Act.

EPA interprets the statute to require that by February 4, 1990, States are to have complied with the new requirements for numeric criteria for priority pollutants in their water quality standards. We are providing assistance to the States in this effort through workshops and direct technical support. We are also closely monitoring States' progress.

I am pleased to say that at this time we expect almost all States to comply with the 1990 deadline. For those States unable to comply, EPA must prepare to take action itself. Meeting the new standards will be costly for many dischargers. We anticipate a good deal of controversy and, possibly, litigation by affected dischargers and others over the new standards, which may cause

management problems and delays in full implementation. However, the new requirements have already resulted in dramatic progress at the State level.

Another of the Water Quality Act's initiatives to control toxic discharges was to mandate promulgation of effluent guideline regulations to set discharge limits for certain industries. The new section 304(m) required that EPA publish and regularly update its plans for effluent guidelines initiation and revision. The Act also required full public review and comment prior to the plan's publication.

EPA published its proposal for public comment in August 1988, and received a number of comments on it. We now expect to publish a final Section 304(m) plan in September 1989. This is after the statutory deadline, but I believe our final plan will benefit from the careful review and ranking of the many industrial categories that are potential candidates for regulation. We want to be sure that we address the most important dischargers in terms of environmental impact and regulatory needs beyond existing permits and municipal pretreatment programs.

The proposed 304(m) plan identified three major industry guideline projects to which EPA is already committed (offshore oil and gas, pesticides, and pulp and paper) and 3 industrial projects which are near completion. In addition, the notice identified 15 additional categories of dischargers for which we requested comment as candidates for new guidelines. These

industries were being evaluated as guideline candidates before the enactment of Section 304(m), based on the findings of the Domestic Sewage Study, concerns raised by the EPA Regions and States, and other CWA mandates. We are now developing our final plan and budget.

NPDES Permits for Storm Water Discharges

The Water Quality Act requires EPA to develop a phased and tiered approach to regulating storm water discharges under the NPDES program. It requires EPA to promulgate permit application requirements for storm water discharges associated with industrial activity and discharges from large municipal separate storm sewer systems (systems serving a population of 250,000 or more) by February 4, 1989. In addition, EPA is to promulgate permit application requirements for discharges from medium municipal separate storm sewer systems (systems serving a population of 100,000 or more, but less than 250,000) by February 4, 1991. Other storm water discharges are to be evaluated in two Reports to Congress, with EPA designating additional storm water discharges to be regulated and establishing requirements for state Storm Water Management Programs by October 1, 1992.

EPA began implementing the first phase by issuing a proposed rulemaking on December 7, 1988, for storm water discharges associated with urban areas over 100,000 population and industrial and construction activities. The comment period on the proposed regulation closed on March 7, 1989, with EPA

receiving over 450 public comments. EPA's current schedule calls for promulgation of final regulations by the spring of 1990.

A major emphasis of this program will be to address illicit connections of non-storm water discharges and improper disposal to municipal separate storm sewers. In addition, municipal management programs to reduce pollutants from construction site runoff, urban runoff (runoff from residential and commercial areas), and runoff from industrial areas to municipal separate storm sewers will be addressed.

A major concern is the substantial costs that needed analysis and controls will place on municipalities. Thus, we are encouraging approaches, such as targeted sampling requirements and best management practices like eliminating illegal discharges, that are environmentally sound and less costly.

Combined Sewer Overflows

A related issue that EPA believes States must address more aggressively than in the past, is pollution from Combined Sewer Overflows (CSOs). Many urbanized areas in the United States are served by a combination of sanitary sewers, separate storm sewers, and combined sanitary and storm sewers designed to carry sanitary sewage, industrial and commercial wastewater and storm water. CSOs are flows from a combined sewer that are discharged into a receiving water prior to going to a POTW to prevent plant overflow. They occur most frequently during heavy rainstorms, and often do not receive any treatment prior to discharge. In

many areas CSOs lead to wastes washing up on beaches and entering environmentally sensitive near shore areas.

EPA estimates that 1200 combined sewer systems exist in the United States discharging untreated waste and floatables directly into surface waters. Although some large projects to mitigate the water quality impacts associated with CSO discharges have been undertaken in a few municipalities, the majority of CSO discharges are currently either not addressed or are inadequately addressed in NPDES permits.

EPA has asked the States to focus on these sources, and major improvements in current controls may be needed, especially in coastal areas where beaches are affected.

As with municipal stormwater permitting, municipalities are concerned about the costs that needed controls will entail. EPA is encouraging cost effective approaches in selecting control methods and will require costly new construction only where other measures are insufficient to protect water uses.

Nonpoint Source Pollution

The 1987 amendments established a new program to address nonpoint source pollution. Section 319 of the Clean Water Act requires States to develop both a nonpoint source Assessment Report and a State Management Program. These actions were to be submitted to EPA on August 4, 1988.

State Assessment reports are to describe the nature, extent, and causes of nonpoint source pollution. Management Programs are

to identify what the State intends to do over the next four years to address the identified nonpoint source pollution problems.

Unfortunately, this initiative is running behind schedule and deadlines were not met by many States. As of May 3, 1989, however, 55 of 56 States and Territories had submitted Assessments and 45 had submitted draft or final Management Programs. EPA has emphasized the need for all States to complete their submissions by August 4, 1989. All Assessment Reports should be completed and approved by then or EPA will begin developing reports consistent with the Act. EPA also plans to complete its review and approve or disapprove State Management Programs by January 4, 1990. Unlike the Assessments,however, EPA has no authority to step in and develop a Management Program where a State fails to do so.

Some States have produced sound Assessments and Management Programs which provide a firm foundation for State nonpoint source programs, but much remains to be done. We are working with the States to improve the most important aspects of their Management Programs so that they can move expeditiously into full implementation of the highest priority elements, while continuing to upgrade other elements.

EPA also established a Task Force to develop a multi-faceted "blueprint" for action on nonpoint source pollution. We are working with a broad range of federal agencies to establish a viable national framework for addressing this pervasive problem.

We are providing information through national and regional conferences, workshops and developing a national clearinghouse. We also look to other EPA programs, such as pesticides control, groundwater, wetlands, estuaries, and NPDES permitting, to reinforce nonpoint source control efforts as they carry out their efforts.

Since States report that funding problems are one reason for delays in completing Section 319 programs, EPA is taking a variety of actions to encourage full use of available resources. For example, we are working to make funds under Titles I, II, and VI of the Act available to States for these efforts and are assisting States and localities in developing their own innovative funding mechanisms. In addition, EPA is working with other Federal agencies, especially the Department of Agriculture, to facilitate use of its resources to support State and local nonpoint source management activities. We will continue to work closely with the Department of Agriculture through the nonpoint source and groundwater initiative proposed in the President's Budget.

Sewage Sludge

In the 1987 amendments, Congress strongly restated its mandate that EPA protect sewage sludge quality by identifying contaminants which may be present in concentrations that might adversely affect public health or the environment. EPA is required to issue regulations specifying acceptable management practices and numerical limitations for each such contaminant for

individual sludge use or disposal practice. Although we have not been able to meet the statutory deadlines, we have made progress in the sludge-management program and have stepped up our efforts significantly since the 1987 amendments.

On May 2, 1989, we published final regulations governing State sludge management programs and their implementation. In addition, we have issued interim guidance for EPA and State permit writers so that sludge management practices can begin to be improved now, pending completion of EPA's technical regulations.

The sludge technical rule, identifying the pollutants, criteria, and needed management practices, was proposed on February 6, 1989 and the public comment periods ends on August 7, 1989. This is one of EPA's first multi-media, risk-based rules and its development has been extremely complex and difficult.

The rule deals with all environmental media, five sludge use and disposal practices, several dozen pollutants, numerous environmental pathways and endpoints, risk-based approaches and policies, and may have implications for many aspects of EPA's risk management priorities. It is accompanied by approximately 2500 pages of technical support documents.

We are soliciting comment on all of this material, including the proposed requirements, alternative regulatory approaches considered, and the technical basis for developing requirements. Given the rule's complexity, EPA has conducted an extensive

outreach program to educate reviewers on its contents and associated issues.

A principal issue is whether the proposed criteria are unnecessarily strict for land application and distribution and marketing, thus discouraging appropriate beneficial reuse of sludge as a soil conditioner and fertilizer and inadvertently encouraging sludge incineration. This would indeed be a perverse result, as incineration may pose a greater environmental and health risk. EPA's position, as most recently articulated in its 1984 strategy, has been that the best strategy for sludge is to use it as a resource. Available evidence shows that sludge application has many benefits in agricultural management. We are engaged now in seeking full scientific peer review of our proposal and expect this will help us to set appropriate final criteria that both protect health and the environment and encourage beneficial reuse.

EPA's municipal solid waste regulations, proposed on August 30, 1988, cover municipal sewage sludge that is disposed of in a municipal solid waste landfill. These regulations should be promulgated by the end of 1989.

Future Directions

These are but a few of the many new activities that EPA and the States are engaged in to implement the 1987 Water Quality Act. As we look to the future, we see no need for major legislative changes, although a number of important challenges lie ahead.

We need to work more effectively and to strengthen our State and local partnerships. We need to find efficient ways to ensure that technical information is available to help the State and local authorities who work in the "trenches" of water pollution control.

Another area we need to emphasize is preventing and not just controlling pollution. Clean-up costs are high and increasing. Growing knowledge of toxic substances and how they react in the environment has forced us to look at alternatives to classic clean-up methods. End-of-pipe controls can provide strong incentives for source reduction and recycling. However, we need to avoid end-of-pipe controls that move harmful levels of pollutants one from medium to another. We need to promote product substitution, source reduction, and recycling of waste products, as well as water conservation. We have already seen how the 1985 amendments to the Food Security Act have helped encourage farmers to follow more environmentally sound farming practices. We need to educate the public on a variety of day-to-day activities that cause pollution in the first place, as well as mobilize effective local support for water program implementation and citizen monitoring.

The Congress has asked us for a number of reports which will provide a basis for future consideration of amendments. The most important reports will cover implementation of the State Revolving Loan Fund Program and State Nonpoint Source programs.

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

TESTIMONY OF LESLIE CAROTHERS, COMMISSIONER
CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION
BEFORE THE UNITED STATES SENATE COMMITTEE ON THE ENVIRONMENT AND PUBLIC WORKS
JUNE 16, 1989

Good morning, Mr Chairman, distinguished Senators. I would like to thank the committee for offering Connecticut the opportunity to present testimony on the critical issue of toxics in our waters. Connecticut has a problem with toxic pollutants in some State waters. Our report under 304(1) identified 54 point sources causing toxic impacts, 29 of which were also identified using federal guidance based on priority pollutants. We believe that Connecticut's problems are similar to those faced by all other states, regardless of the number of waterbodies identified in their 304(1) submissions. The problem in Connecticut is evidenced by concerns for protecting the health of human consumers of fish and shellfish which may have been contaminated by exposure to toxic substances. The problem is also evidenced by impacts on the biological communities which inhabit our streams and rivers. These impacts range from minor localized alterations in the native species present to a few areas where the biological integrity of the aquatic ecosystem is seriously impaired by toxics.

The State has implemented an aggressive, results oriented program which recognizes the fundamental differences between these two aspects of the toxics problem and the need to employ different regulatory approaches to solve them. Although significant reductions in the discharge of toxic pollutants have already been achieved, complete implementation of our water quality-based permitting program and ultimate elimination of toxic impacts to Connecticut waters remains a major challenge for us. However the requirements being imposed under Section 304(1) will force us to change the focus of our program and could significantly divert resources to activities which will yield limited return in improved water quality.

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Connecticut's toxics control program does not distinguish between the various classes of toxic pollutants, but rather establishes regulatory priorities based on the potential impact to the environment resulting from each discharge. The State recently made major changes made in the regulations governing NPDES permitting practices to address toxics control. The most significant of these was a provision requiring all wastewater dischargers to prepare a detailed evaluation of the potential impact of their discharge on the receiving water and submit this evaluation within 6 months of adoption of the regulations. Dischargers were required to conduct a battery of biological toxicity tests (bioassays) on effluent as it is discharged from the existing treatment system, analyze these same effluent samples for all known or suspected toxic compounds, and prepare an assessment of the potential impact on the receiving water during low streamflow periods. This body of data, in combination with data collected through the State's comprehensive biological and chemical surface water monitoring program, presented Connecticut with a unique opportunity to evaluate the effectiveness of the 304(l) listing requirements to identify toxic pollution problem areas. Our long and productive relationship with the scientists at EPA research laboratories in Duluth, Gulf Breeze, and Narragansett and the Regional biologists in Lexington has been instrumental in developing the staff expertise necessary to interpret this information and undertake the evaluation.

In reviewing our 304(l) documents submitted, you will quickly see the diversity of Connecticut industry and the broad range of stream sizes and segments impacted. We believe that Connecticut's 304(l) submission is a complete and full accounting of the current toxic impacts in our waters.

Evaluation of the assessment procedure revealed two interesting findings:

1. The 304(l) mandated approach to assessment identified only approximately one half of the point sources which are causing toxic impacts to State surface waters. We listed 29 point sources as identified using EPA guidance for Section 304(l). We also included a list of 25 additional point sources identified as causing toxic

pollution impacts by biological testing procedures which were not identified by the 304(l) chemical by chemical process. Some of the State's most serious water quality problems were not detected by the priority pollutant assessment approach, yet all point sources toxic to aquatic organisms were identified by the biological testing.

2. Although Connecticut's 304(l) report identified priority pollutants as a possible cause of toxicity in 29 effluents, subsequent chemical and biological testing of many discharges has shown that the causative agent of effluent toxicity was not the priority pollutant which was identified by the priority pollutant assessment approach. For example, in several effluents containing heavy metals (eg. copper, nickel, zinc) at concentrations which would exceed EPA in-stream numerical criteria, effluent toxicity was essentially eliminated by removal of chlorine and other oxidative treatment chemicals from the effluent. In two instances, common nitrate salts formed as a result of treatment to neutralize pH and remove heavy metals were identified as the principal cause of effluent toxicity. Restricting the use of biocides and water conditioning agents was identified as the most effective technique for toxicity reduction at another industrial facility where heavy metals were initially suspected as responsible for effluent toxicity based on comparisons of effluent concentrations with numerical criteria.

It is clear that the toxics problem cannot be resolved unless the cause of the problem is identified and corrected. We are concerned that Section 304(l) and EPA guidance and regulations places too great an emphasis on regulation of priority pollutants as the preferred means of achieving water quality goals. Sole reliance on those methods will not even identify all impacted river segments. Limitations on priority pollutants will not result in water quality improvements where impairment of water quality is not due to these compounds.

Our experience suggest that a regulatory program based on control of priority pollutants will resolve only a fraction of the toxic water quality problems we are faced with. In Connecticut, this incremental improvement can be achieved only at the expense of the established, broad based, comprehensive regulatory program which addresses all causes of effluent toxicity, including the thousands of non-priority pollutants which represent the major threat to water quality.

Implementation of the reporting requirements of Section 304(l) required a major effort by all states. Connecticut was fortunate in that the State regulations provided precisely the data needed to conduct an in-depth assessment. The discrepancies evident between the submissions of the various states can be attributed to three significant factors:

1. The short time allocated to prepare the assessments and the concurrent development of EPA guidance. Revisions to the guidance which occurred during the time States were preparing the assessments lead to many inconsistencies in reporting;

2. The discrepancies developed due to differences in the quality and quantity of monitoring data available to the States for preparing the assessments; and

3. The requirement that priority pollutants be identified as the cause of the toxic impact.

It is a relatively easy task to identify toxic effluents through biological toxicity testing or to identify water impacted by toxics through biological monitoring of stream conditions. Our experience and that of EPA research scientists has been that identifying the toxic agent in the complex mixture of compounds which constitute an effluent or may be present in a surface water, is a much more difficult task.

Effluent toxicity testing is an extremely powerful regulatory tool. The live fish and invertebrate organisms used in these tests are exposed to both the priority and non-priority pollutants present in the effluent. Interactive effects which can only occur when numerous pollutants are mixed together can also be detected. Standardized testing protocols are available and the results of these tests can be directly related to biological impacts in receiving waters. We have found that permittees experience great difficulty arguing that their effluent is not contributing to a water quality problem when confronted with such direct evidence of their effluent's effect on living organisms. Enforceable permit limits can be readily established based on toxicity test results as evidenced by Connecticut's regulatory program. Because this approach focuses attention on discharges which are clearly causing a water quality problem, and requires permittees to change existing production or treatment practices to eliminate toxicity, results of program implementation are easily tracked in terms of real water quality improvements.

However, where human health is a concern due to potential contamination of fish or shellfish resources, it is clear that restrictions of the discharge of specific pollutants is necessary. Whole effluent toxicity testing is inappropriate to evaluate human health impacts for obvious reasons and a pollutant by pollutant approach must be employed. Connecticut is somewhat unique among states in that our regulations prohibit point source discharges to surface waters designated for drinking water supply. In the past, Connecticut has relied on federal guidance to establish discharge limitations on compounds such as PCB's, dioxins, and those few pesticide and solvents for which federal criteria are available. We fully intend to incorporate these criteria into our State Water Quality Standards and look to EPA to provide health effects criteria for compounds which represent potential threats to consumers of fish and shellfish taken from State waters. The issue of toxics control, however, goes far beyond protecting the edibility of aquatic organisms. In most instances, the critical issue is protection of the aquatic biological community itself from the toxic effects of effluent discharges.

We have made great strides in the last several years and firmly believe that a results oriented regulatory program based on the use of biological toxicity testing combined with numerical criteria for controlling health impacts is the most straight forward and direct means of achieving State and National clean water goals. As you review Section 304(1) I suggest that you consider the following:

- The emphasis on priority pollutants contained in this section should be reexamined. States should be encouraged to focus on the use of whole effluent toxicity testing for regulation of effluents where the primary concern is protection of the stream biological community.

- Greater emphasis should be placed on in-stream monitoring and assessment techniques for determining attainment of designated uses. States should be encouraged to develop strong monitoring programs and put this information to use, rather than mandating regulatory program requirements based on "desk-top" analysis of often unreliable data.

- Research into the causes of toxic pollution problems has confirmed that, in many cases, effluent toxicity originates from unexpected sources. Creative approaches to remediation are necessary to resolve the problem. Section 304(1) should be revised to incorporate a broader scope of toxics problems and federal regulatory program requirements should not unnecessarily restrict the State's ability to respond to new developments in toxicology and treatment technology.

- The balance between numerical criteria for control of pollutants which represent a human health threat and the use of biological toxicity testing and assessment methods to regulate pollutants impairing fish and aquatic life uses should be restored to the extent that it is consistent with the scientific and technical guidance provided by EPA.

The approach to toxics control outlined in Section 304(l) forces states to focus pollution control efforts on regulation of priority pollutants. Our experience suggests that implementation of this approach will result in some incremental improvements to water quality but will fall far short of achieving the goal of eliminating point source toxic impacts. EPA guidance and regulations further force states to invest significant resources in development of numerical criteria for individual pollutants which may not be responsible for a toxicity problem or which are already effectively regulated by limits on whole effluent toxicity. Diversion of resources from our established program to develop and implement a numerical criteria-based approach for pollutants which are already effectively regulated through permit limits on effluent toxicity may result in unnecessary delays. Unfortunately, the effectiveness of a State's program is often measured by its compliance with federal regulations. It is critical that the 304(l) reporting process include measures of true progress in attaining clean water goals. Most significantly, the 304(l) approach does not effectively address the numerous non-priority pollutant "hot spots" where regulatory actions are urgently needed.

In conclusion, I would like to reiterate Connecticut's commitment to achieving the ambitious goals of the Act within the time frames established by Congress, and thank you for this opportunity to discuss the issue of Section 304(l) implementation with you.

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TESTIMONY OF THE

NATURAL RESOURCES DEFENSE COUNCIL

BEFORE THE

SUBCOMMITTEE ON ENVIRONMENTAL PROTECTION

OF THE

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS:

IMPLEMENTATION OF THE 1987 WATER QUALITY ACT

June 18, 1989

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Mr. Chairman and members of the Subcommittee, thank you very much for inviting me to present the Natural Resources Defense Council's[1] "Scorecard on Clean Water" -- an analysis of the Environmental Protection Agency's record in carrying out the mandate of the 1987 Water Quality Act Amendments.

INTRODUCTION

Progress in controlling toxic pollutants entering our waters has been slow and halting. The 1972 Clean Water Act launched a two-pronged attack on toxic water pollution. The first prong consisted of uniform, nationwide controls on discharges of toxic pollutants from all of the nation's industries (technology-based controls).[2] The second prong required stricter controls on individual dischargers where needed to protect water quality in individual waters (water quality-based controls). When EPA failed to issue nationwide standards to implement the first prong of this strategy, NRDC sued. The results of this lawsuit, the "NRDC Consent Decree," were incorporated by Congress into the 1977 Clean Water Act Amendments.

Some significant progress was made under the approach embodied in the NRDC Consent Decree and the 1977 Amendments. But major gaps remained, resulting in continued, and in some cases worsened, contamination of U.S. rivers, lakes and coastal waters. Major industries and large amounts of toxics were not covered by nationwide technology-based controls. Critical Clean Water Act programs, designed to protect human health and the environment from toxics in polluted urban runoff ("stormwater"), sewage sludge and sewage effluent, were implemented poorly, if at all. And the important second prong of the war on toxic water pollution, water quality-based controls, remained a paper tiger.

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[1] The Natural Resources Defense Council (NRDC) is a national environmental organization with over 100,000 members. NRDC is dedicated to the wise use and conservation of our natural resources, and the protection and rejuvenation of the environment for this and future generations. Since the enactment of the modern Clean Water Act in 1972, NRDC has kept a watchful eye on EPA's implementation of the law.

[2] These requirements apply both to dischargers who release pollutants directly into surface waters ("direct dischargers") and to those who release their wastes into public sewage treatment plants ("indirect dischargers").

Congress sought to fix these problems when it reauthorized the Clean Water Act in 1987. But again, EPA has not lived up to Congress' expectation. NRDC has identified both sins of omission (inaction) and sins of commission (illegal interpretations of the law, leading to inadequate or improper implementation). In each of the toxics control tasks set by Congress in 1987, ranging from categorical standards development, to sludge standards, to toxic hotspot elimination and stormwater control, to water quality criteria and standards, we have seen delay and inadequacies.

In many cases, EPA has violated or continues to violate deadlines for action established by the Congress. While we no longer find the agency bent on undoing the progress of previous years as we did in the early 1980's, we still find it unwilling in some cases to make tough decisions and to press forward with strong programs. EPA has not demanded the resources it needs to do its job; nor has it pressed the States to obtain the resources they need.

This testimony evaluates EPA's progress in controlling toxics in water. We look first at the agency's fulfillment of the mandate for national regulations: national effluent standards applicable to direct and indirect categories of dischargers, national standards setting limits on toxics in sewage sludge, and national regulations for the control of stormwater discharges. Next, we evaluate EPA's progress in implementing its responsibilities for state and local toxics control: overseeing the adoption by the states of numerical water quality standards for toxic pollutants, toxic hotspot elimination programs, and nonpoint source management programs.[3] Finally, we discuss the role of monitoring to fulfill the toxics elimination agenda.[4]

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[3] We also believe there are serious problems with state implementation of the Clean Water Act. For example, the State of Georgia interprets the "fishable and swimmable" requirement of the Act to mean "fishable and boatable." Moreover, Georgia believes that "fishable" means that fish are caught, but not necessarily eaten. However, this testimony primarily addresses EPA's implementation of the Clean Water Act.

[4] NRDC has written detailed comments, reports and briefs concerning many of the issues addressed in this testimony. A bibliography of relevant NRDC publications appears as an addendum hereto.

I. The National Agenda

A. Categorical Standards[5]

National effluent discharge standards for categories of industries form the backbone of the national NPDES permitting program. These standards define what constitutes the "Best Available Technology" (BAT) to treat toxic pollutants, and specify the equivalent level of pretreatment necessary for indirect industrial discharges into sewage treatment plants. Similarly, they define what is supposed to be an even higher standard of wastewater treatment for new sources, moving us toward the CWA's goals of eliminating the discharge of pollutants by 1985,[6] and prohibiting the discharge of toxic pollutants in toxic amounts.[7]

Recognizing the need to identify and plug loopholes in categorical standards. Congress called on EPA to review current categorical standards in order to identify and to close these gaps.[8] This Committee's Report reveals Congress' intent to improve the pace of EPA's standards development:

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[5] See Comments of the Natural Resources Defense Council, Inc. on Proposed Plans of the U.S. Environmental Protection Agency to Regulate Industrial Dischargers of Toxic Pollutants under Section 304(m) of the Clean Water Act (October 24, 1988) (Bibliography, Item No. 1).

[6] CWA Sec. 101(a)(1).

[7] CWA Sec. 101(a)(3).

[8] This command was incorporated in both the 1987 amendments and in amendments to the Resource Conservation and Recovery Act enacted in 1984. Section 308(f) of the WQA created new sec. 304(m) of the CWA, calling for EPA, within 12 months and biennially thereafter, to publish a schedule for the annual review and revision of effluent guidelines; to identify new categories of sources discharging pollutants for which guidelines have not yet been written; and to establish an expeditious schedule for promulgating new standards.

Section 3018 of the Hazardous and Solid Waste Amendments of 1984 required that EPA, by August of 1987, make whatever revisions were necessary to national pretreatment standards under the Clean Water Act in order to ensure that hazardous wastes entering sewage treatment works are adequately controlled to protect human health and the environment.

> Although the EPA continues to move forward with developing guidelines for... both direct and indirect dischargers, the slow pace in which these regulations are promulgated continues to be frustrating.[9]

Under new section 304(m), EPA was directed to review existing standards for completeness and adequacy, and to identify new industries not presently covered at all. The final plan of action for writing new standards was to be published within 12 months, and was to result in the promulgation of the needed standards within 4 years after publication.[10]

Evidence abounds that many categories of industries continue to discharge hundreds of millions of pounds of toxic priority and non-priority pollutants each year into surface waters and sewage treatment plants. For example, EPA's 1986 "Report to Congress on the Discharge of Hazardous Wastes to Publicly Owned Treatment Works" (the "Domestic Sewage Study") concluded that "significant organics sources... are largely unregulated under existing categorical standards."[11] The study found that then-existing "categorical standards may not ensure adequate control on [sic] the discharge of other non priority RCRA hazardous constituents by industrial sources,[12] and that "some industrial categories, including the organic chemicals, pesticides, and pharmaceutical industries, discharge substantial quantities of these nonpriority hazardous constituents in process wastewaters."[13] A more recent study of coastal waters by the Office of Technology Assessment (OTA) also recommended that EPA expand substantially the scope of its categorical standards, and cited gaps in the standards as a major cause of coastal water pollution.[14]

The Domestic Sewage Study identified the following industries as potentially significant sources of toxic pollutant

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[9] Sen. Rept. 50, 99th Cong. 1st Sess. 24-25 (1985).

[10] CWA sec. 304(m)(1)(C).

[11] "Report to Congress on the Discharge of Hazardous Wastes to Publicly Owned Treatment Works," U.S. EPA, Office of Water Regulations and Standards, EPA 530-SW-86-004 (Feb. 1986) ("Domestic Sewage Study"), at 6-63.

[12] Id. at 6-64.

[13] Id. at 6-65.

[14] Office of Technology Assessment, "Wastes in the Marine Environment," (hereafter OTA Report), at 28.

discharges, which EPA initially had exempted from regulation under the 1976 NRDC Consent Decree:

Category	Annual Loadings of Toxics
Pharmaceuticals[15]	7369 Kkg[16] (16.25 million lbs.)
Equipment mfg. & assembly[17]	7715 Kkg (17.0 million lbs.)
Indust. & commerc. laundries	1486 Kkg (3.27 million lbs.)
Textile mills	449 Kkg (0.99 million lbs.)
Adhesives & sealants	201 Kkg (0.44 million lbs.)
Printing & publishing	161 Kkg (0.35 million lbs.)
Plastics molding & forming	28 Kkg (0.06 million lbs.)
Rubber mfg.	18 Kkg (0.04 million lbs.)
Timber products	14 Kkg (0.03 million lbs.)

All told, these exempted industries discharge an estimated 38.3 million pounds per year of toxic organics and metals.

In addition to these once-exempted industries, the Domestic Sewage Study concluded that numerous other industries were discharging vast quantities of hazardous wastes (ranging from spent solvents to ignitable wastes and pesticide wastes) to sewage treatment plants. These industries, which include the construction industry, cosmetics, fragrants, flavors and food additives, fertilizer manufacturers, laboratories and hospitals, miscellaneous chemical formulators, motor vehicle services, various service-related industries, soaps and detergent manufacturers and formulators, transportation services and others, collectively discharge an estimated 62.2 million pounds per year of hazardous wastes into public sewer systems.[18] EPA's research indicates that the hazardous waste treatment industry alone, consisting of almost 2000 facilities, receives a raw pollutant wasteload on the order of 654.8 million pounds of toxic and nonconventional pollutants each year.[19]

Finally, even where categorical standards exist, evidence shows that the regulations are incomplete. First, the NRDC

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[15] Figures represent unregulated organic pollutants only; metals are regulated now.

[16] Kkg = metric ton, or 1.102 short tons.

[17] Organic pollutants only; no data are available for metals.

[18] Domestic Sewage Study, Table 3-33, p. 3-161.

[19] EPA Hazardous Waste Decision Document.

Consent Decree focused on a list of "priority" pollutants. But this list was never intended to be exhaustive, and as noted by Senator Chafee during the 1987 reauthorization, "[j]ust because a toxic pollutant is not on the list doesn't mean it is any less toxic to human health or the environment than one that is listed pursuant to the act." Cong. Rec. S2804 (daily ed. March 7, 1985). For example, the Domestic Sewage Study found that eight of the ten highest discharges into POTWs from four organic chemicals industry categories are nonpriority hazardous pollutants.[20]

Even more striking are EPA's estimates of priority toxics that escape regulation through existing effluent guidelines. The most notable examples are:

Industry	Estimated Annual Post-BAT Discharges of Priority Toxics
Coal Mining	2.7 million pounds
Iron and Steel	2.5 million pounds
Leather Tanning	1.0 million pounds
Ore Mining	4.6 million pounds
Petroleum Refining	1.8 million pounds
Pulp and Paper	11.3 million pounds
Textiles	2.0 million pounds[21]

All of the industries noted here should be subject to new or improved categorical standards. Yet, despite Congress' mandate and all the compelling evidence discussed above, EPA's plan for action proved to be too little, too late. The agency's proposed plan to implement sec. 304(m) was published six months after the final plan was due;[22] and with only one exception, it contained commitments to promulgate revised or new guidelines only for a handful or industries, all of which were subject to either statutory deadlines or settlement agreements.[23] For all other

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[20] Domestic Sewage Study, p. 3-24. An estimated 2530 metric tons (over 5.5 million pounds) of these pollutants are discharged into POTWs by these four categories even after pretreatment. Id. at 3-21. Similar results are apparent for a large number of other industries. See Id. at 3-60, 3-63-64; Appendix E.

[21] Source: EPA Industry Status Sheets.

[22] 52 Fed. Reg. 32584 (Aug. 31, 1988).

[23] The agency set forth its plans to promulgate standards for the pesticides industry (subject to a December 31, 1986 deadline (continued...)

industries, both those in need of revision and those in need of coverage for the first time, EPA committed only to study the matter further -- carefully avoiding committing itself to the task set forth in section 304(m).

We believe that EPA's hesitation springs from concern over the resources required to promulgate effluent guidelines. It is a time-consuming and technically rigorous exercise, but it must be done; the law requires it, and for good reason. Ironically, when EPA reviews its successes in controlling surface water pollution, it often points to the effectiveness of the technology-based permitting program; yet, by failing to keep abreast of new information and new industries in need of regulation, the successes of the categorical standards program will be swallowed up by its loopholes and anachronisms.

NRDC is encouraged by a recent ruling by the U.S. Court of Appeals for the Fifth Circuit that EPA failed to evaluate whether new organic chemical plants can achieve zero discharge of toxic and other pollutants through wastewater recycling and other methods.[24] This directive gives hope for a second generation of toxic water pollution controls, required by section 304(m), that would achieve Congress' long-awaited goal of eliminating the release of toxic and other pollutants into our rivers, lakes and coastal waters. But this laudable goal will not be possible unless EPA takes its responsibility for this program far more seriously, and unless it is given the resources needed to do the job.

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[23](...continued)
in the 1987 amendments); the offshore oil and gas industry (subject to a settlement agreement); the nonferrous metals forming industry (settlement agreement); nonferrous metals manufacturing (settlement agreement); and aluminum forming (settlement agreement). In addition, EPA published plans to revise standards for the pulp, paper and paperboard manufacturing category based on the findings of the National Dioxin study; however, in the case of paper mills EPA made no commitment as to completion date. 53 Fed. Reg. 32584 et seq., Aug. 25, 1988).

[24] Chemical Manufacturers Association, et al., v. U.S. Environmental Protection Agency, et al., No. 87-4849 et al., 5th Cir., March 30, 1989).

B. Effluent Guidelines for the Pesticides Industry[25]

Congress was particularly concerned about EPA's slow progress in completing the effluent guidelines for the pesticides manufacturing and formulating/packaging industry.[26] The WQA established a deadline of December 31, 1986 (the WQA became law in February 1987) for completion of these long-awaited standards.[27]

Two and a half years later, it would appear that completion of the pesticides rule is still far away; the most recent Semiannual Regulatory Agenda did not even hazard a guess as to the date when a proposed rule would be published.[28]. A questionnaire concerning the waste treatment practices and financial status of formulators and packagers will not be mailed until early next year, although a parallel questionnaire was sent to the manufacturing facilities in early 1989. Equally troubling, the questionnaire concerning economic and financial matters in the pesticide manufacturing industry, necessary for EPA to analyze whether the regulations will be economically achievable for the industry as a whole, was delayed for over a year due to wrangling with the Office of Management and Budget over its contents.[29] These OMB-spurred delays are of grave concern in any event, but are particularly out of place when the

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[25] See Testimony of the Natural Resources Defense Council, Inc. before the Subcommittee on Oversight and Investigations, Committee on Energy and Commerce: "EPA Contracting: Pesticide Regulation" (May 14, 1987) (Bibliography No. 2).

[26] Effluent guidelines for the pesticide industry had been promulgated in late 1985, only to be withdrawn in response to an industry challenge. EPA had concluded that its rulemaking database was too flawed to withstand the challenge.

[27] Section 301(f) of the WQA, a free-standing provision, established this deadline for both the pesticides industry standards and those for the organic chemicals, plastics and synthetic fibers (OCPSF) industry. The final rule for the OCPSF industry was promulgated in November of 1987.

[28] EPA Semiannual Regulatory Agenda, 54 Fed. Reg.17258,17281-82 (April 24, 1989).

[29] See, e.g., letter from Arthur Evans, Acting Chief, Natural Resources Branch, OMB Office of Information and Regulatory Affairs, to Linda Fisher, EPA Assistant Administrator for Policy Planning and Evaluation, Apr. 28, 1988, disapproving the economic portion of EPA's questionnaire.

regulation being delayed is subject to a statutory deadline. OMB delay in such an instance is illegal.

Meanwhile, the gap left by EPA's withdrawn pesticide regulation means that an estimated 1.96 million pounds per year of toxic pollutants will continue to be discharged to surface waters and sewage treatment plants each year until the gap is filled.[30]

C. The Pretreatment Program[31]

Toxic pollutants discharged into the nation's sewage treatment plants threaten human health, environmental quality, worker safety, and the integrity of the plants themselves. While some toxic organic pollutants are degraded during the sewage treatment process, many of these toxics wind up polluting the plant's receiving waters, sludge (see next section), and in the case of volatile organic pollutants, the air. And toxics that corrode the plant's hardware or interfere with the bacteria essential to the sewage treatment process jeopardize the nation's $100 billion investment (since 1972 alone) in sewage treatment facilities. To prevent these problems, Congress devised the "pretreatment" program to ensure that the combination of "pretreatment" by the indirect industrial discharger and treatment at the sewage plant are at least as stringent as is required of an analogous direct discharger.[32]

While pretreatment was not a major focus of the 1987 WQA, Congress did legislate a requirement that EPA correct past deficiencies in funding and staffing, particularly to ensure that the program would be effectively implemented and enforced.[33]

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[30] Preamble, Final Rule regulating pesticide industry discharges (later withdrawn as defective); 50 Fed. Reg. 40672, 40678 (Oct. 4, 1985).

[31] See Comments of the Natural Resources Defense Council, Inc. on "EPA Administered Permit Programs, the NPDES System; General Pretreatment Regulations, Proposals to Implement the Recommendations of the Domestic Sewage Study," 53 Fed. Reg. 47632 (Nov. 23, 1988) (Bibliography No. 4).

[32] Even stricter pretreatment may be required to protect the plant, its workers, or water, sludge or air quality.

[33] Section 309(b) of the WQA provides that "The Administrator shall take such actions as may be necessary to increase the (continued...)

Unfortunately, EPA's record on pretreatment implementation since 1987 has not been an impressive one.

First, there remain a dozen states that have been delegated the responsibility for managing their NPDES permitting programs, but that have failed to accept responsibility for the pretreatment program.[34] This split in authority blatantly violates the Clean Water Act, which correctly recognizes that it is administratively cumbersome for one entity to manage permitting and another to manage the pretreatment program. To date, EPA has taken no action to remedy this situation, with the possible exception of attempting by polite persuasion to convince the states to shoulder their responsibilities. The appropriate remedy would be for EPA to withdraw NPDES permitting authority from recalcitrant states, or to withhold Federal program funds until the state took action.

More important, evidence indicates that pretreatment programs around the country are implemented extremely poorly. A General Accounting Office study, released only last month, confirms that the pretreatment program remains inadequately implemented.[35] It found that "[i]ndustrial users were in considerable noncompliance with discharge limits under the

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[33](...continued)
number of employees of the Environmental Protection Agency in order to effectively implement pretreatment requirements under section 307 of the Federal Water Pollution Control Act."

The House Report stated that "[t]he Committee [on Public Works] believes that insufficient Agency resources have been dedicated to regulatory and implementation activities related to the National Pretreatment Program.... EPA resources dedicated to the pretreatment program approval and enforcement activities should be substantially increased. This is especially true with regard to the continuing effort which will be involved in assuring that the program is implemented effectively." H. Rept. 189, 99th Cong. 1st Sess. 229 (1985)

[34] See 52 Fed. Reg. 45824 (December 2, 1987). Since publication of this list, the State of Virginia has assumed responsibility for its pretreatment program.

[35] "Improved Monitoring and Enforcement Needed for Toxic Pollutants Entering Sewers," GAO/RCED-89-101 (April 1989). The study was requested by the Chairman and Ranking Minority Member, Subcommittee on Investigations and Oversight, House Committee on Public Works and Transportation. See also "Industrial Pretreatment in the Chesapeake Bay Watershed: The Untapped Potential for Reducing Toxics," Chesapeake Bay Foundation (1989).

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pretreatment program."[36] Based on the POTWs' own assessments, about 41% of the industrial users studied exceeded their permit limits during the year of the study![37]

These violations contributed to significant problems at the POTWs. GAO concluded that (1) 20 percent of the plants studied experienced pass-through of untreated pollutants to receiving waters; (2) 28 percent experienced interference with the treatment process (such as corrosion of pipes and other equipment); (3) 10 percent reported sludge contamination; and (4) 4 percent experienced worker health and safety problems.[38]

While EPA relies upon POTWs to enforce pretreatment program requirements, that reliance clearly is misplaced. The study found that "the absence of aggressive enforcement by POTWs against industrial user violators may be an important underlying cause" of the many violations that were documented by the GAO.[39] The POTWs were highly reluctant to take firm action against violators; only about 5 (+/-2) percent used administrative fines and 5(+/-2) percent used civil penalties against industries that violated their pretreatment requirements.[40] In the vast majority of cases, the industry got off with nothing more than a verbal warning or a written notice of violation.[41] The report found that the POTWs' reluctance to take enforcement action often was coupled with a lack of a formal policy determining when such actions should be taken.

The GAO concluded that the POTWs' roles in their local communities made it very difficult for them to play the role of police officer. "[I]ndustrial users often employ local citizenry and pay a large share of the taxes that support both local government and POTW operations. For these and other reasons, an

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[36] GAO Report at 3.

[37] Id.

[38] Id. at 4. An inexplicable anomaly in these data is that only 20 percent of the POTWs reported pass-through to receiving waters, while 30 percent reported violations of NPDES permits, which are per se indications of pass-through!

[39] Id. at 23-24.

[40] Id. at 27.

[41] Id.

industrial user may have influence over the affairs of both the local government and POTW operations."[42]

The story does not end with failures on the part of POTWs to enforce against their industrial users. The pretreatment program also requires the State or EPA (depending on who is the approval authority) to oversee the POTWs in the program. Here, too, the record is grim. The GAO report found that 48 percent of the POTWs it surveyed violated one or more of EPA's key criteria for assessing the adequacy of program implementation.[43]

EPA conceded that until recently it had not given adequate priority to enforcement, and has said that it plans to do more in this regard. It is too soon to tell whether these promises will be fulfilled. In the meantime, it is important for Congress to hold EPA accountable for these massive inadequacies in the program, and to ask some basic questions about the overall approach to regulating toxics entering our sewers. Most important, is it appropriate to rely upon a system that requires local POTWs, politically ill-suited for the responsibility, to hold primary responsibility for implementation and enforcement? Or, should some fundamentally different approach be considered? For example, should significant industrial users become part of the NPDES permitting scheme and therefore directly answerable to the state or EPA? As the next reauthorization comes closer, we hope Congress will explore these issues more fully.

An even more basic question goes to the principle of pretreatment itself. In the past Congress accepted the concept of allowing industries to discharge their wastes into public sewers. But this policy was based largely on the notion of biological wastes that can be handled by typical POTWs, and not toxics that can jeopardize health and the environment, the

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[42] Id. at 30. This lack of enforcement is not only bad environmental policy; it is inequitable as well. "Sister industries" who discharge directly to surface waters, while not always subject to adequate enforcement, have been penalized more heavily for the same types of violations than their indirect counterparts.

[43] Id. at 33. The criteria were as follows:
"Are more than 20 percent of a POTW's significant users out of compliance with pretreatment standards or reporting?
* Did the POTW inspect or sample less than 80% of its significant industrial users in the past year? (Note that this criterion builds in a 20% failure rate as acceptable.)
* Has the POTW failed to issue required control mechanisms to some of its significant industrial users?

nation's major investment in sewage treatment infrastructure, and the ability to reuse treated sewage -- in the form of sludge and effluent -- as beneficial products. Perhaps the time has come to revisit whether additional discharges of toxics into the nation's sewers should be allowed, or whether industry should bear the responsibility for treating its own wastes.

D. National Regulations Limiting Toxics in Sewage Sludge[44]

One consequence of poor pretreatment is the generation of contaminated sludge, which can both pose a threat to human health and the environment and interfere with the ability safely to reuse sludge for beneficial purposes.

Since 1978 Congress and the public have been waiting for EPA to promulgate regulations to limit toxic contaminants in sewage sludge to levels that are safe for human health and the environment, for each of the sludge use or disposal options employed by sewage treatment plants.[45]

National regulations governing toxics in sludge are an important part of the overall Clean Water Act regulatory scheme. While sludge has the potential to be a beneficial product that can be used as a soil conditioner or fertilizer when uncontaminated, national standards are needed to limit any contamination threats -- to ensure that the public and the environment are not exposed to toxic contaminants that could be emitted by incinerators, taken up by crops through agricultural sludge application , or leached into groundwater after land application or landfilling.

Once those national standards are established, municipalities that generate sludge at their publicly owned treatment works will implement controls on toxic contaminants through the pretreatment program; they will impose restrictions on toxic pollutants discharged by industrial users in order to protect sludge quality and enable the municipality to use or dispose of its sludge safely.

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[44] See Brief in Support of Plaintiff's Motion for Partial Summary Judgment, NRDC v. Reilly (Aug. 12, 1988); Reply to EPA's Response in Opposition to NRDC's Motion for Summary Judgment (Sept. 27, 1988) (Bibliography Nos. 3A and 3B).

[45] The 1977 Clean Water Act amendments had established a one-year deadline for promulgation of these regulations. Federal Water Pollution Control Act of 1977, P.L. 95-217, sec. 54(d) (creating CWA sec 405(d)).

In 1987, frustrated with EPA's decade of inaction[46] in regulating sludge, Congress established a new set of deadlines for action: EPA was to promulgate its first set of regulations governing toxics in sludge, based on available information, by no later than August 31, 1987.[47]

Despite the firm deadlines in the 1987 amendments, EPA was very slow to act. In March of 1988, NRDC sued EPA for its failure to meet the statute's proposal and promulgation schedule.[48] Finally, in February of 1989 EPA did propose the first round of sludge regulations.[49] The proposal is long and complex, filling over 200 pages in the Federal Register. Because the proposal is complicated and controversial, EPA established an extraordinarily long (6 months) period for public comment.[50]

EPA has told NRDC, the court and the public generally that it will need from August of 1989 (the close of the public comment period) until October of 1991 -- over two more years -- to complete drafting the final sludge regulations. This delay is both illegal and unconscionable.

As long ago as 1983, EPA told the Senate Environment and Public Works committee that it had available to it adequate information to regulate the twenty or so most significant

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[46] The Conference Report pointed out that "[t]hese new deadlines are intended to put EPA on a schedule to correct its failure to meet the 1978 promulgation deadline... and are not intended to excuse the Agency from its failure to meet the original deadline." H. Rept. 1004, 99th Cong. 2d Sess. 160 (1986).

[47] Water Quality Act of 1987, sec. 406, amending Clean Water Act sec. 405. The 1987 amendments also expanded the breadth of the mandate to regulate sludge; EPA is directed to regulate sludge from publicly owned treatment works "or any other works treating domestic sewage". WQA sec. 406(c), creating new CWA sec. 405(f).

[48] Natural Resources Defense Council et al. v. Reilly, No. 88-2101 (E.D. Pennsylvania). Plaintiffs' motion for summary judgment has been briefed and argued; no decision has been rendered.

[49] 54 Fed. Reg. 5746 (Feb. 6, 1989).

[50] Concurrently with the public comment period, EPA has facilitated the creation of two scientific peer review committees to evaluate the proposal: one committee to study the incineration portion of the rule, and another to consider the land application and distribution and marketing proposal.

pollutants in sludge; indeed, it was on the basis of these assurances that Congress established the two-tier deadlines spelled out in the 1987 amendments, along with a provision calling for biennial review and revision of the rules as appropriate to fill any gaps later on.[51] EPA now claims that it needs the additional time to conduct a major new survey (The "National Sewage Sludge Survey"), as well as to evaluate the comments it expects to receive on this rule.

We have already waited a dozen years for this rule. Meanwhile, while we wait, many municipalities are faced with important and costly decisions about which method of sludge use or disposal to pursue. (The Association of Metropolitan Sewerage Agencies joined NRDC as a plaintiff-intervenor in challenging EPA's continued delay, presumably because its members are caught in this regulatory vacuum.) If EPA needs more money or staff to complete its analysis of the comments and to revise the proposed rule, then it should ask Congress for them. But we should not have to wait another thirty months for these rules.

With respect to the content of the proposed rules, NRDC is still in the process of evaluating the draft. While we are not prepared at this point to offer a detailed critique of the draft rule, there is one gaping loophole which must be brought to Congress' attention.

EPA has proposed relatively stringent, pollutant-specific rules governing the quality of sludge that is land applied, distributed and marketed, or placed in "monofills" -- landfills containing only sludge. In contrast, EPA has published a proposed rule that places virtually no restrictions on sludge quality when the sludge is placed in municipal solid waste landfills along with municipal garbage.[52]

First, we fail to understand how it can be that "monofilled" sludge can require detailed regulation in order to be safe, while the same apparently is not true for landfilled sludge. We therefore have concerns about the inherent safety of the landfilling proposal.

Second, EPA's "landfill loophole" will create a perverse incentive for municipalities to continue to put their sludge into relatively unregulated landfills -- despite the fact that we have a growing landfill capacity problem, and despite the fact that the practice of landfilling runs directly counter to EPA's own

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[51] H. Rept. 1004, 99th Cong. 2d Sess. 160 (1986).

[52] 53 Fed. Reg. 33314 (August 30, 1988).

policy of encouraging the beneficial reuse of sludge rather than its disposal.[53]

Most absurd of all, EPA proposes to give to sewage treatment plants that landfill their sludge permission to issue pretreatment "removal credits" to their industrial users -- licenses to discharge more toxic contaminants than they otherwise would be allowed to discharge. EPA reasons that, since sludge can be highly contaminated and not "interfere" with landfilling under these excessively weak rules, there is no point in making industrial facilities remove their sludge-fouling toxics before discharging their wastewaters to sewage treatment plants.

The practical impact of this removal credit "double whammy," on top of the landfill loophole, will be that industrial dischargers will have a very strong incentive to push their sewage treatment plants towards landfilling and away from beneficial reuse. This, too, runs counter to the EPA policy on sludge management, as well as Congress' express desire to encourage beneficial sludge use practices.

If EPA fails to respond to public comment on this critical issue, we would urge Congress to act to close the "landfill loophole" by legislative means.

E. National Regulations to Control Pollutants in Stormwater[54]

The rainwater that washes down city streets and over construction sites can become heavily laden with toxic contamination. For example, the National Urban Runoff Program (NURP) study found at least 67 toxic contaminants, including numerous heavy metals and products of automobile combustion, in

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[53] EPA's "Policy on Municipal Sludge Management", 49 Fed. Reg. 24358 (June 12, 1984), states that "EPA will actively promote those municipal sludge management practices that provide for the beneficial use of sludge while maintaining or improving environmental quality and protecting public health." Id.

[54] See Comments of the Natural Resources Defense Council, Inc. on EPA's Proposed NPDES Application Regulations for Stormwater Discharges, 53 Fed. Reg. 49416 et seq. (Dec. 7, 1988) (Bibliography No. 5).

polluted urban runoff.[55] Yet, despite the fact that stormwater discharges are point sources subject to permitting requirements under the Clean Water Act since the modern statute's enactment in 1972, in practice EPA had done everything possible to avoid bringing such discharges under the NPDES umbrella.[56]

In an effort to break the regulatory impasse and spur EPA on to begin to take action, Congress in 1987 amended section 402 of the CWA to create a new stormwater regulatory framework.[57] New section 402(p) calls for the phase-in of municipal stormwater permits as follows:

(a) discharges from municipal separate storm sewer systems serving 250,000 or more people are to be permitted by 4 years after the date of enactment;

(b) discharges from municipal separate storm sewer systems serving 100,000 or more people are to be permitted by no later than 8 years after the date of enactment; and

(c) stormwater discharges associated with industrial activity are to be subject to permits immediately, meeting all applicable requirements of sections 402 and 301 of the CWA.[58]

EPA was directed to promulgate permit application regulations for the first group of dischargers no later than two years after the date of enactment.

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[55] Results of the Nationwide Urban Runoff Program, Volume 1 - Final Report.

[56] EPA first tried to exempt stormwater from NPDES permitting altogether, until this approach was rejected by the courts. NRDC v. Train, 396 F. Supp. 1393 (D.D.C. 1975), aff'd, 568 F.2d 1369 (D.C.Cir. 1977). But even after this ruling, EPA's stormwater program lagged. See "Chronology: EPA Regulation of Stormwater Discharge," Cong. Research Service Report for Congress, July 19, 1988, for a chronology of the tortuous path that stormwater regulation (or more aptly, non-regulation) has followed over the past five years.

[57] Sec. 405 of the WQA created new section 402(p) of the CWA, "Municipal and Industrial Stormwater Discharges."

[58] Section 402(p) creates an exemption from permitting requirements for all other municipalities, but that exemption expires in 1992. See sec. 402(p)(1), (p)(5).

Once again, EPA has done too little, too late. In December of 1988 EPA published proposed regulations for stormwater permit applications;[59] final regulations were due in February of 1989, but EPA's most recent Semiannual Regulatory Agenda states that the final rule will not be completed until April of 1990![60]

Moreover, the proposed permit application regulations are grossly deficient. Their most glaring faults are that they cover too few cities, request too little information, fail to attack the problem of industrial stormwater discharges, and impose virtually no actual controls on stormwater pollutants.

Concerned about the potential burden on municipalities of actually imposing stormwater permitting requirements after almost two decades of inaction, EPA has sought through the rulemaking process to make the burden even smaller --effectively undermining the intent of Congress in the process. In the draft rule EPA proposes to redefine "municipality" to include only incorporated municipal entities, rather than the far broader definition of municipality in the Clean Water Act.[61]

As a result of this narrow proposal, only about 25 percent of the U.S. population will be covered by the rule, as opposed to 66 percent if EPA broadened its proposal to include counties. In addition, many of the nation's major growth areas would be excluded by the proposal. For example, none of Long Island would be covered by EPA's proposed approach; the vast majority of New Jersey's heavily populated coastal counties would fall outside the reach of the "incorporated municipality" definition, and stormwater controls would be required in the District of Columbia, but not in Montgomery County, Maryland or Arlington County, Virginia.

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[59] 53 Fed. Reg. 49416 (December 7, 1988).

[60] EPA Semiannual Regulatory Agenda, 54 Fed. Reg. 17258, 17285 (April 24, 1989).

[61] CWA section 502(4) defines "municipality" as

> a city, town, borough, county, parish, district, association, or any other public body created by or pursuant to State law having jurisdiction over disposal of sewage, industrial wastes, or other wastes, or an Indian tribal organization, or a designated and approved management agency under section 208 of this Act.

But still more troubling, even if EPA were to abandon the "incorporated municipality" approach, the proposed rules nevertheless would result in little progress towards controlling stormwater contamination, because EPA's proposal includes virtually no actual control requirements for municipalities to implement in order to obtain their permits. The proposed rule amounts to a virtual "write your own permit" program for participating municipalities.

Considerable information already does exist on the removal efficiencies and appropriate settings in which to use a variety of stormwater control mechanisms.[62] There is no "knowledge gap" that prevents EPA from prescribing the appropriate levels of pollution reduction that would represent the "maximum extent practicable" standard mandated by the WQA. An appropriately flexible approach, that takes into account geographical and climatological differences, could be devised. But EPA seems so bent on providing the municipalities with maximum "flexibility" that it is unwilling to prescribe any level of control at all. Nor does the proposed rule establish any programmatic minimum standards, such as requirements that a municipality have adequate financial resources and legal authority to implement the program, or adequate procedures for addressing interjurisdictional conflicts or coordination needs. Clearly, EPA's "laissez faire" approach fails to fulfill the mandate of section 402(p).

The proposed rules also establish inadequate monitoring requirements. EPA asks the municipalities for data from only a handful of stormwater outfalls, and for only a handful of storm events over a three month period. Yet, according to EPA's own analysis of the NURP, such infrequent monitoring yields statistically insignificant results!

Finally, the draft stormwater permitting regulations create an illegal loophole for industrial facilities. Despite the fact that the law is very clear in requiring permits immediately for all discharges "associated with industrial activity," EPA proposes to exempt from permitting requirements those industrial facilities that discharge their stormwater into a municipal stormwater system -- and to exempt them regardless of whether the municipality is subject to the permitting requirements itself! EPA attempts to analogize this approach to the pretreatment program, in which industrial discharges receive further treatment at a POTW to the level of secondary treatment. The analogy is a false one. First, unlike the pretreatment program, the proposed rule does not require any pretreatment of the stormwater discharge. Second, the stormwater in a separate system probably

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[62] See, e.g., Chapter 8 of the NURP Summary.

will not receive the equivalent of secondary treatment before being discharged by the municipality (particularly under EPA's proposal, which fails to define any minimum level of treatment). Thus, EPA's industry exemption is justified on a sham analysis.

As this testimony makes clear, we believe that EPA has, since the 1987 WQA, continued with its decade-long effort to regulate stormwater -- if at all -- in name only. Unless the proposed rules are vastly improved, we will have nothing more than a "paper permit" program; municipalities' complaints that the program is both costly and will provide little or no environmental benefits, will be borne out.

II. The Toxics Control Agenda at the State and Local Level

Several parts of Congress' toxics control strategy in the 1987 amendments require that EPA oversee the implementation of controls at the state or local level.

A. The Toxic Hotspot Control Program[63]

One of the cornerstones of the "beyond BAT" toxics control program of the 1987 amendments is the requirement that the states identify those stream segments that remain impaired -- i.e., that have not become "fishable and swimmable" despite the efforts of the past twenty years, "due to new more subtle problems... of devastating toxic substances and pollution from nonpoint sources, such as runoff from farmland and urban areas."[64] As Senator Chafee emphasized during floor debate:

> [H]undreds of tons of toxic substances are being discharged into the Nation's waters each year from direct and indirect dischargers. It is indeed ironic that we must now warn people against consuming fish caught in many areas cleansed of conventional

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[63] See Comments of the Natural Resources Defense Council, Inc. and the National Audubon Society on EPA's Draft Final Guidance on Implementation of the Requirements Under Section 304(l) of the Clean Water Act, As Amended (Oct. 5, 1987); Comments of the Natural Resources Defense Council, Inc. on "National Pollutant Discharge Elimination System; Surface Water Toxics Control Program," 54 Fed. Reg. 1300 (January 12, 1988) (Bibliography Nos. 6(a) and (b)).

[64] 131 Cong. Rec. 8002 (remarks of Senator Chafee, during consideration of S. 1128) (daily ed. June 12, 1985).

pollutants but which are contaminated by toxic pollutants to the point that they pose a potential health threat to those who eat them.[65]

The toxic hotspot control program of section 304(l) represents Congress' plan to go "beyond BAT" and to move forward expeditiously to remedy toxic hotspots.

Section 304(l) requires each state to identify all waters within the state that will not meet water quality standards or objectives after application of the CWA's technology-based requirements. The states must catalogue their impaired waters on three progressively more comprehensive lists, which we may call the "short list," the "medium list" and the "long list." The "short list" includes only waters that will not meet water quality standards "due entirely or substantially to discharges from point sources of any toxic pollutants" on the priority pollutant list.[66] The "medium list" includes water bodies that will not meet water quality standards "due to toxic pollutants."[67] It includes water bodies impaired by both point and nonpoint sources, and toxics that might not yet be listed as priority pollutants. The "long list" is a comprehensive list of waters impaired by both point and nonpoint sources, by any pollutant (whether toxic or conventional), and with any known water quality problem (whether or not the state has water quality standards applicable to the pollutant).[68]

Then, section 304(l) further specifies that "for each segment of the navigable waters included on <u>such lists</u>," the state must:

(1) identify the "specific point sources discharging any such toxic pollutant" believed to be impairing water quality, and the amount of the toxic being discharged by the source; and

(2) establish an "individual control strategy ... [to] produce a reduction in the discharge of toxic pollutants from point sources ... through the establishment of effluent limitations ... and water quality standards ..., which reduction is sufficient, in combination with existing controls on point and

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[65] Senate debate on S. 1128, 131 Cong. Rec. S8002-8003 (daily ed. June 12, 1985).

[66] CWA sec. 304(l)(1)(B).

[67] CWA sec. 304(l)(1)(A)(i).

[68] CWA sec. 304(l)(1)(A)(ii).

nonpoint sources, to achieve the applicable water quality standard as soon as possible, but no later than three years after the date of establishment of the strategy."[69]

Obviously, compliance with section 304(l) presents a significant challenge. EPA, doubtless concerned about the dimensions of the demand placed on itself and the states, chose once again to interpret the CWA narrowly. EPA interpreted the language of the law to mean that "individual control strategies" -- the actions that make the listing exercise meaningful -- were required only for those waters on the "short list" noted above.

How significant is this unlawfully narrow reading of section 304(l)? The states and EPA identified over 17,000 impaired water bodies and stream segments on their "long lists"; but under EPA's interpretation, only 595 of these toxic hotspots (less than 5 percent) need be addressed through the individual control strategies[70] mandated by section 304(l)(1)(D)![71] In our view, EPA's action illegally emasculates the program and undercuts Congress' goal of speeding up the states' efforts to identify and control toxics problems from all sources. Senator Chafee said that:

> If we are going to repair the damage to those water bodies that have become highly degraded as a result [of] toxic substances, we are going to have to move expeditiously on this beyond-BAT program. The nation cannot tolerate endless delays and negotiations between EPA and the states on this program. Both entities must move aggressively in taking the steps to make this

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[69] CWA secs. 304(l)(1)(C) and (D).

[70] The states' toxic hot spot lists were due at EPA on February 4, 1989. EPA had from February 4 to June 4 to approve or disapprove the States' submissions. Environmental groups have been reviewing the States' "short lists" to evaluate whether, even under EPA's definition, the states' lists are too restrictive. Citizens have until October 4, 1989 to petition the EPA Administrator to place additional water bodies on the states' lists, and we anticipate that listing petitions will be filed in a number of states.

[71] NRDC has challenged this interpretation of section 304(l) in the 9th Circuit Court of Appeals. NRDC v. U.S. EPA, No. 89-70135. NRDC's opening brief was filed this week.

program work within the timeframe established by this bill.[72]

EPA's narrow and illegal interpretation of the law represents precisely the sort of "endless delay" that Congress said it would not, and ought not to, tolerate.

B. Numerical Water Quality Criteria for Toxic Pollutants[73]

1. Status of States' Adoption of Numerical Criteria

As part of the "comprehensive program" to control toxics in surface waters, the 1987 amendments also amended section 303 of the CWA[74] to require that each state, in the course of its first triennial review following enactment of the law, adopt numerical water quality criteria for any priority pollutants for which EPA had developed criteria documents, and the discharge or presence of which in the state's waters could reasonably be expected to interfere with designated uses. The WQA specifically directed that "[s]uch criteria shall be specific numerical criteria for such toxic pollutants. Where such numerical criteria are not available,... such state shall adopt criteria based on biological monitoring or assessment methods..." (emphasis added)

This focus on numerical criteria was based on an understanding of the many important roles that criteria play in a state's water quality program. First, criteria define for the public and the regulators the health of each water body, and are critical to effective and systematic assessment of state water quality. Second, criteria are the benchmarks against which water quality-based permit limits are measured. Third, it is through the water quality standard-setting process (of which setting numerical criteria is a key part) that citizens can have their say concerning the level of water quality they consider acceptable. As one of the bill's primary authors put it,

> Narrative criteria, implemented through biomonitoring, may be successful in expeditiously identifying and

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[72] 131 Cong. Rec. S8005 (remarks of Senator Chafee during debate on S. 1128) (daily ed. June 12, 1985).

[73] See Comments on EPA's Draft Guidance for State Implementation of Water Quality Standards for CWA Sec. 303(c)(2)(B) (March 31, 1988) (Bibliography No. 7).

[74] Section 308(d) of the WQA created new CWA sec. 303(c)(2)(B).

> limiting toxic discharges on a broad scale.... However, in developing toxic criteria EPA and the States cannot exclusively depend on narrative criteria [i.e., "no toxic in toxic amounts"] as the primary means to combat toxic hazards."[75]

The states' record in carrying out the mandate of sec. 303(c)(2)(B) and adopting numerical criteria for toxics is a mixed one. The most up-to-date summary that NRDC has obtained from the agency is nearly a year old; it showed that 8 out of 57 states (as that term is defined in the CWA) had adopted only between 0 and 10 numerical criteria for toxics.[76] However, we noted great disparities among the Regions. For example, in Region IV no State had adopted numerical criteria for more than 42 priority pollutants, and two of the eight states had adopted none at all. In comparison, in Region IX, six out of eight states had adopted numerical criteria for over 100 toxic priority pollutants. Since different states may be on different triennial review cycles it is relatively difficult to assess the success rate of this program. We note, however, that EPA's Office of Water Regulations and Standards has made clear to the States that it will step in to adopt numerical criteria for those states that fail to act in a timely manner; we hope to see expeditious follow-up in the next ten to twelve months on this stated intent of EPA.

However, in one key respect it is clear that EPA has, once again, succumbed to pressure from the regulated community and has developed a tortured misreading of the clear requirements of the law.

In providing guidance to the states on implementation of the numerical water quality criteria requirement of section 303(c)(2)(B), EPA sanctioned the use of what has been dubbed a "translator mechanism" approach to standards adoption.[77] Under this approach, a state develops a "formula" for arriving at a numerical water quality criterion; the formula is submitted for

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[75] 131 Cong. Rec. S8005 (remarks of Sen. Chafee on S. 1128)(daily ed. June 12, 1985).

[76] "State Adoption/Proposal of Numeric Criteria for Priority Pollutants as of August, 1988," US EPA, Office of Water Regulations and Standards, Criteria and Standards Branch (undated).

[77] "Guidance for State Implementation of Water Quality Standards for CWA § 303(c)(2)(B)," EPA Office of Water Regulations and Standards, September 1988.

public comment, but the actual criteria are not derived, and the actual numbers that the formula will yield in any given case remain a mystery.

The "translator mechanism" approach, which violates the specific numerical criteria mandate of the CWA, also makes public participation in standards development virtually impossible. The formula approach will be used primarily in the permit-writing process. Not until a permit is being drafted will anyone calculate the numerical criteria that will apply to a water body. At that point, the approved "formula" can be "plugged" with whatever data the interested advocate can persuade a state to use; each permit-writing exercise becomes another debate about the adequacy of relevant studies and the proper interpretation of those studies. While in ordinary circumstances citizens could participate in the criteria-setting triennial review, and then rely upon the numerical criteria that they had helped to develop to form the basis for permitting decisions, with this "translator mechanism" approach citizens interested in protecting water quality must participate in every permit-writing procedure around the state to make sure that water quality is protected.

In addition to public participation concerns the translator approach makes it far less likely that numerical criteria will be assigned to all of a state's water bodies as a lodestar against which to measure impairments. If criteria are merely tools to be employed in the permit-writing process, much of their utility is lost. Moreover, it is not clear how the translator approach will be used to address toxic pollutants from nonpoint sources.

Only a few states appear ready to opt for the translator mechanism exclusively (although several more are adopting a combination of numerical criteria and some variation on the translator). Nevertheless, we believe that this agency-created loophole in the law should be plugged.

2. Status of the Criteria Development Process at EPA

For a number of years the states have been calling for an increase in the pace at which EPA develops and updates its section 304(a) criteria documents for toxics -- documents that summarize the latest knowledge about the kind and extent of "all identifiable effects on health and welfare including, but not limited to, plankton, fish, shellfish, wildlife, plant life, shorelines, beaches, esthetics, and recreation which may be expected from the presence of pollutants in any body of water,

including ground water..."[78] At a recent EPA conference on the future of the water quality standards program, many state representatives voiced eagerness for EPA to increase the level of technical assistance to them in deriving appropriate criteria for their states.

It would appear that the Criteria and Standards Branch lacks adequate resources to keep pace with the demand for new or revised criteria. For example, there is consensus among the states and EPA that criteria defining sediment quality are needed to help assess and clean up areas suffering from contaminated sediments. Yet, at last report EPA had less than one FTE devoted to this complicated task.

In another effort to reduce the costs of criteria development, EPA has begun the process of publishing "water quality advisories" rather than "criteria". An "advisory" is an EPA hybrid, born of resource constraints. It consists of the best information EPA could assemble concerning a pollutant, but (unlike criteria) EPA does not seek to fill data gaps through further research. Instead, the agency makes do with what is available in the literature.

C. The Nonpoint Source Control Program

By now the litany of reasons why we need better controls on poison runoff -- nonpoint sources of pollution from urban, agricultural, construction, silvicultural, and other land use activities -- is a familiar one. In the most recent national water quality survey completed under section 305(b) of the CWA, poison runoff accounted for 65% of the stream miles for which the states reported impairments of water quality;[79] 76% of impaired lake acres,[80] and 45% of impaired estuarine waters.[81] Moreover, groundwater contamination from agricultural activities was reported to be a problem by 79% of the states reporting on water quality.[82] Recent studies have shown that an estimated 800

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[78] CWA sec. 304(a)(1)(A).

[79] National Water Quality Inventory; 1986 Report to Congress, EPA-440/4-87-008 (November 1987) at 20.

[80] Id. at 31.

[81] Id. at 43.

[82] Id. at 60.

million pounds of pesticide active ingredients are applied to agricultural lands each year.[83]

Although EPA has possessed the legal authority to require that states address nonpoint source impairments of designated water body uses since 1972, that authority has never been expressly translated into a uniform national program.[84] Nor have the states been quick to act in the absence of a clear national mandate. To fill this perceived void, in 1987 Congress created section 319 of the CWA.[85]

Right from the start, the states have balked at the requirements of section 319. They justifiably complain that they have been provided no additional funds to implement section 319. Although section 319 authorized $400,000,000 over four fiscal years, to date no funds have been appropriated for the program. EPA requested no appropriation for the nonpoint source program in FY 88 or FY 89, and Congress failed to fill this void. For FY 90, EPA has requested a small increase in the section 106 program

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[83] Agricultural Pesticide Use in Estuarine Drainage Areas: A Preliminary Summary for Selected Pesticides; Pait et al., NOAA Strategic Assessment Branch, Ocean Assessments Division (January 1989) at 5.

[84] For an overview of EPA's un-flexed muscles to require regulation of nonpoint source pollution, see "Poison Runoff: A Guide to State and Local Control of Nonpoint Source Water Pollution," soon to be published by the Natural Resources Defense Council.

[85] Section 316 of the WQA, "Management of Nonpoint Sources of Pollution," created CWA section 319.

The new provision requires that each state, within 18 months after the date of enactment, submit to EPA an assessment identifying waters within its borders impaired by nonpoint sources and the sources of those discharges, and describing the process whereby the state will reduce pollution from those sources to the maximum extent practicable. If the state fails to prepare such an assessment, then EPA is to prepare and publish the assessment for the state.

Each state also is required to submit to EPA, within 18 months, a management plan setting forth how it will identify the Best Management Practices (BMPS) and programs that it proposes to implement in order to control poison runoff, along with a schedule for implementation "at the earliest practicable date". The law contains no requirement that EPA develop a management plan for a state that fails to develop an approvable plan of its own.

to fund activities under section 319; but the request is a drop in the bucket.[86] The states have taken this as a measure of EPA's weak commitment to the program.

To date, EPA has approved only 20 state 319 assessments; many states have submitted only drafts thus far. EPA has found only nine management plans to be approvable in whole or in part.

We believe this lackluster performance is due in part to the absence of a firm tool for EPA enforcement of section 319. A threat from EPA to withhold 319 monies is an empty one since no monies have been appropriated anyway. And EPA has no authority to develop its own management plan for the state.

At this point we do not believe that the states or EPA legitimately can wring their hands and claim that they do not know how to control poison runoff. Indeed, certain localities and states around the country have developed effective programs to combat the problem, despite the lack of effective leadership from Washington.

NRDC soon will release a major guidebook outlining the best ways to assess and combat poison runoff. The book, entitled "Poison Runoff: A Guide to State and Local Control of Nonpoint source Water Pollution," makes specific recommendations as to how best a program can be structured. Among "Poison Runoff's" recommendations:

* State water quality standards must be used as the measure of the effectiveness of poison runoff control programs. Standards should be used to develop site-specific load reductions needed to protect fishing, swimming and other water uses.

* State water quality management agencies should be given the lead role in designing, coordinating and evaluating individual programs to control poison runoff. As a general rule, agricultural agencies are not properly suited to this task.

* Voluntary cost sharing programs alone cannot control agricultural runoff. Successful regulatory program models do exist in a handful of states, and they should be followed by other states and localities.

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[86] "Funding for Important Water Programs," Eric Draper, Clean Water Action Project (June 1989).

* Programs to control contaminated urban runoff must be based on the link between land use and water quality. Zoning and comprehensive planning statutes must be revised to make water quality considerations a mandatory part of the decision-making process.

* Specific funding sources other than general revenues (such as dedicated property taxes or stormwater utilities) must be identified for poison runoff control programs.

* Comprehensive management and planning are needed to address this problem, and the watershed is the appropriate planning and implementation unit. All jurisdictions within a watershed should be required to address nonpoint sources within their jurisdictions to protect the watershed as a whole.

Based on our extensive research into the literature and current state program activities, we conclude that it is possible to define appropriate standards for an adequate state nonpoint source management program. Such standards can provide flexibility and allow for differences among states, but must include some firm "bottom lines."

By contrast, EPA's "Nonpoint Source Agenda for the Future" consists largely of "technical assistance", "public education", and "encouragement" to the states. Taken alone, without more formal plans to require firm action, the Agenda is a prescription for state inactivity. For example, EPA's promise to "guide and support States and local governments as they examine the wide assortment of regulatory tools at their disposal, and find the right regulatory solutions for their problems"[87] is not a substitute for requiring the states to develop those badly needed regulatory approaches as part of their 319 responsibilities -- or their duties under section 303(e). EPA can, and should, withhold 106 monies from states failing to carry out section 319.

And Congress should seriously consider strengthening the Clean Water Act's tools for federal oversight and control of state activities in this area. While nonpoint source pollution may not be amenable to the type of site-specific permitting approach of the NPDES program, it is not a "black box" about which nothing in known and nothing can be done. Based on the poor response to date with the requirements of section 319, Congress should not consider the final legislative chapter on

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[87] "Nonpoint Sources: Agenda for the Future"; EPA Office of Water (January 1989) at 19.

nonpoint sources to have been written. If states fail to control poison runoff under the 1987 law, as they did under the 1972 Act, Congress may have to resort to a far more prescriptive approach.

III. Monitoring and Reporting: The Hidden Agenda

All of our dire (and rosy) predictions about the fate of our surface waters hang on the quality of the information we have about the state of the waters today, and about trends in water quality. But that information is woefully incomplete. Moreover, the means by which it is reported to the decisionmakers -- in particular, to Congress -- may result in misapprehensions about what we know and how sure we are.

One very grave example of this problem is the Water Quality Inventory cited elsewhere in this testimony, and required by sec. 305(a) of the CWA to be submitted to Congress biennially. The Inventory may give us the best "snapshot" we now have; but that "snapshot" is too blurry, and too many faces never appear in it at all.

A closer reading of the Inventory reveals that only 21% of river miles nationally actually have been assessed; 32% of lake acres and 55% of estuary square miles have been assessed. Rates of assessment vary tremendously; Michigan claims to have assessed 100% of its river miles, while Texas has assessed less than 20 percent and Alaska less than two percent.[88] And with respect to toxic pollutants, the situation is even worse. Few states monitor routinely for more than a handful of toxic pollutants, leaving our overall understanding of the extent of pollution incomplete. Thus, national estimates about water quality are really based on a small piece of the total picture.

In addition, the way in which states report on water quality impairments is likely to lead to a significant overestimation of water quality. For example, states can report waters as "fully supporting" their designated uses even though they violate water quality standards up to one out of every ten days. Waters can be reported as "partially supporting" their uses if they violate standards up to one out of every four days, and need only report "nonsupport" if standards are violated more than once every four days.

These criteria give little comfort to those who expect their waters to be safe for fishing and swimming whenever they go to

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[88] National Water Quality Inventory, 1986 Report to Congress, at 19.

their favorite lake or beach. But in fact, the situation is even worse. With respect to the most familiar indicator of water pollution, bacteria, even when EPA's recommended criteria are met, it is assumed that 8 out of every 1000 swimmers at freshwater beaches and 19 out of every 1000 swimmers at marine beaches will become ill![89]

In light of these uncertainties, and the lack of actual field level monitoring and assessment reflected by the inventory, there is a strong possibility that water quality impairments are being grossly underreported. We strongly urge Congress to press EPA to demand more of the States in their routine water quality monitoring programs, and in order to comply with the requirements of section 305(b), which requires that they submit a biennial report to EPA on which EPA's reports to Congress then are based, and which includes "a description of the water quality of all navigable waters in such state during the preceding year".[90]

CONCLUSION

The 1987 Water Quality Act issued a clarion call to EPA and the states to tackle the tough problems of toxics and poison runoff. Nobody ever said it would be cheap or easy -- only that it has to be done, and done soon, to prevent us from losing ground still further in the fight to reverse the decline in water quality.

EPA has responded to the challenge with a weak and slow-moving program, riddled with illegal loopholes to satisfy the hard-pressed states' concerns about resources and its own inadequate budget.

Congress must ask itself: what is the purpose of passing tough and carefully-targeted legislation if it will simply die a slow death at the hands of the regulatory agency?

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[89] EPA, Quality Criteria for Water 1986, EPA 440/5-86-001, Criteria Summary for Bacteria. For this purpose, "illness" refers to gastroenteritis, meaning (1) vomiting, (2) diarrhea with fever serious enough to be attended by a physician, or (3) stomach ache with nausea attended by a physician.

[90] CWA sec. 305(b)(1)(A).

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Clean Water

SCORECARD ON CLEAN WATER

PERFORMANCE OF THE
U.S. ENVIRONMENTAL PROTECTION AGENCY
IN COMPLYING WITH
THE 1987 WATER QUALITY ACT

NATURAL RESOURCES DEFENSE COUNCIL, INC.

MAY 1, 1989

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NRDC'S SCORECARD ON EPA'S COMPLIANCE WITH THE 1987 WATER QUALITY ACT

REQUIREMENT	HAS EPA MET ITS DEADLINE?	HAS EPA DONE WHAT CONGRESS ASKED?
Sludge Rules	NO	NO
Second Round Rules for New Industries	NO	NO
Toxic Hotspots	Partially	NO
Toxic Water Quality Criteria	Mostly	NO
Stormwater Rules	NO	NO
Organic Chemicals Rules	NO	Mostly
Pesticides Rules	NO	No Action
Nonpoint Source Pollution Plans	Mostly	NO

EXPLANATION OF NRDC'S SCORECARD ON EPA'S COMPLIANCE WITH THE 1987 WATER QUALITY ACT

INTRODUCTION

In February, 1987, Congress reauthorized the federal Clean Water Act through enactment of the Water Quality Act of 1987 (P.L. 100-4). This statute recognized that, despite progress made under the 1972 and 1977 versions of the Clean Water Act, many of the Nation's rivers, lakes and coastal waters remained badly polluted. To cure these problems, Congress established a major new agenda for the U.S. Environmental Protection Agency's water quality program.

August, 1989 will mark the midpoint of the five-year Clean Water Act reauthorization cycle. While this midpoint is only three months away, EPA is far from half-way through the agenda set by Congress in 1987. In fact, EPA is remarkably far behind. Worse, many of the actions that EPA has taken simply do not do what Congress asked.

The Natural Resources Defense Council, Inc. (NRDC), a national environmental organization with over 100,000 members, evaluated EPA's compliance with what NRDC believes are eight of the most important requirements of the 1987 law. The scorecard shows that EPA has violated or continues to violate Congress' deadlines with respect to five of the eight programs, and has met Congress' deadlines only partially for the remaining three. Further, the scorecard shows that EPA is thwarting Congress' intent on five of the eight programs, and is complying with the law only partially for another two. (No action has been taken with respect to the eighth program.)

The Scorecard and an explanation of the scores follow.

Basis for Issue Selection

The 1987 Water Quality Act includes scores of specific requirements. Some of these requirements are critical to the health of the Nation's surface waters. NRDC selected for its scorecard the major action-forcing tasks required by the 1987 law -- tasks that most directly will result in water quality gains. NRDC specifically excluded from its scorecard such tasks as studies, reports, guidance documents, funding programs and site-specific or regional work.[1]

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[1] This does not reflect on the importance of these other programs. NRDC elected to evaluate EPA's overall compliance with the 1987 Water Quality Act by focusing on the most important nationwide programs established or modified by the law.

Issue 1 - Sludge Rules

What Congress Required

EPA is required to set numeric criteria defining safe levels of toxic pollutants in sewage sludge, for sludge use and disposal methods such as landfilling, incineration, and reuse as fertilizer or soil conditioner. (CWA Section 405(d)).[2]

A first round of sludge regulations was due on August, 31, 1987, based on information available to EPA when the 1987 Water Quality Act was passed. A second round of sludge regulations was due on June 15, 1988, based on new information to be collected by EPA.

EPA's Performance

No final sludge rules have been promulgated by EPA. The first round of rules was not proposed until February 6, 1989. EPA did not begin to collect new information until early in 1989.

The proposed sludge rules set specific numeric criteria for toxics in all sludge uses or disposal methods except disposal in municipal landfills, which accounts for about 40 percent of all sludge generated. This will not protect public health from toxics in sludge that is landfilled, and actually will encourage the disposal of sludge in landfills rather than the reuse of clean sludge for fertilizer or soil conditioner. This result is the opposite of what Congress intended.

Issue 2 - Second Round of Industry Rules

What Congress Required

EPA is supposed to identify and fill in the major loopholes in its existing industrial water pollution control regulations. (CWA Section 304(m)). Many industries are not covered by EPA's rules, and rules for industries that are covered are incomplete. As a result, hundreds of millions of pounds of toxic and other dangerous pollutants are discharged each year into the Nation's surface waters.

A final list identifying the gaps in EPA's industrial pollution control regulations was due on February 4, 1988. Final rules to fill in these gaps are due on February 4, 1991.

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[2] Citations to the Clean Water Act are identified as "CWA". Citations to uncodified sections of the 1987 Water Quality Act are identified as "WQA".

EPA's Performance

EPA issued a draft list of possible new industries to regulate on August 25, 1988. EPA does not expect to issue a final list until September, 1989, a year and a half late.

The draft list falls far short of identifying all gaps in EPA's existing regulations. In fact, the only rules scheduled for issuance under the draft list are those that are required by an existing court order or specific statutory provision. Only 6 industries will be regulated under this proposal; and major polluting industries will be excluded.

Issue 3 - Toxic Hotspots

What Congress Required

Following guidance and schedules set by EPA, state water quality agencies were directed to identify "toxic hotspots," waters polluted by dangerous toxic pollutants. States are supposed to develop detailed control strategies to clean up these toxic hotspots. (CWA Section 304(l)).

Final lists of hotspots were due on February 4, 1989. EPA has until June 4, 1989 to approve or disapprove the state lists and control programs.

EPA's Performance

Most states have submitted their lists of toxic hotspots to EPA for review and approval, although many lists were late, and some lists still have not been finalized. Yet EPA still has not issued a final rule to implement this program.

However, based on EPA guidance that included an illegal interpretation of the Water Quality Act, states are developing control strategies to clean up hotspots only if they are polluted entirely or substantially by factories and sewage treatment plants. No control strategies are being prepared to clean up toxic hotspots where a significant amount of the pollution is due to poison runoff from farms, city streets and other lands uses. California, for example, developed control plans for only 4 - 5 percent of the toxic hotspots identified by the state.

Issue 4 - Water Quality Criteria for Toxics

What Congress Required

Following guidance from EPA, states must revise their water quality standards to include specific numeric water quality criteria for toxics that may be present in state waters. (CWA Section 303(c)(2)(B)).

Revisions are due when each state conducts its normal triennial review of water quality standards under CWA section 303.

EPA's Performance

Many states are issuing water quality criteria for toxic pollutants during their triennial reviews. However, because of EPA guidance based on an illegal interpretation of the Water Quality Act, a few states are promulgating only procedures to address toxic pollutants, rather than specific numeric criteria as Congress directed.

Issue 5 - Stormwater Regulations

What Congress Required

To cure EPA's decade-long inaction in regulating polluted runoff from factories and urban areas ("stormwater"), Congress set a firm deadline for EPA to phase in strict new stormwater control requirements. (CWA Section 402(p)).

Regulations covering industrial runoff and runoff from municipalities with 250,000 or more people were due on February 4, 1989. Regulations covering smaller municipalities are due on February 4, 1991.

EPA's Performance

EPA did not issue proposed rules for the first round of stormwater regulations (industries; municipalities greater than 250,000) until December 7, 1988. Final rules are expected to be at least a year late.

EPA's proposed rule severely narrows and weakens Congress' intended controls. For example:

* EPA proposes to require controls only by "incorporated" municipalities, despite the far broader definition of "municipality" in the Clean Water Act. As a result, for example, stormwater controls will be required in the District of Columbia but not in Montgomery County, Maryland or Arlington County, Virginia.

* EPA's proposal includes virtually no actual control requirements, amounting instead to a "write your own permit" program for municipalities.

* EPA illegally proposes to exempt polluted runoff from factories that enters municipal storm sewers, whether or not these sewers are subject to municipal stormwater controls.

Issue 6 - Organic Chemicals Rules

What Congress Required

EPA was required to issue water pollution rules for manufacturers of organic chemicals, plastics and synthetic fibers. The rules were supposed to cover all toxic pollutants released by these facilities. (WQA Section 301(f)).

The final rule was due on December 31, 1986.

EPA's Performance

The final rule was issued on November 5, 1987, almost a year late.

In response to a lawsuit brought by NRDC, the United States Court of Appeals in New Orleans remanded the portion of the rule applicable to new chemical plants, noting that EPA failed to evaluate whether pollution from new plants could be eliminated altogether through such methods as wastewater recycling.

The final rule also failed to regulate a number of toxic pollutants released by chemical plants. The Court declined to rule on this issue, indicating that any challenge to the scope of the EPA rule should be brought in federal district court.

Issue 7 - Pesticides Rule

What Congress Required

EPA was required to issue water pollution rules for manufacturers of pesticides. The rules were supposed to cover all toxic and other dangerous pollutants released by these facilities. (WQA Section 301(f)).

The final rule was due on December 31, 1986.

EPA's Performance

EPA issued a final rule for pesticides manufacturers in 1985. However, in July, 1986, on learning of major problems with the data base compiled for the rule by agency contractors, EPA accepted a voluntary remand of the rule.

EPA has not yet proposed a replacement rule. The initial information questionnaire -- the first step in developing the rule -- was not issued until December, 1988, almost two years after the first rule was remanded! EPA does not expect to issue a final rule until at least 1991, about five years late.

Issue 8 - Nonpoint Source Control Plans

What Congress Required

Following EPA guidance, states were supposed to submit to EPA comprehensive programs to control poison runoff: polluted runoff from farms, urban areas and other land uses. Poison runoff causes at least half of the Nation's surface water pollution. Plans were supposed to reflect major new approaches to controlling poison runoff.

State plans were due on August 4, 1988; EPA approval or disapproval was due on February 4, 1989.

EPA's Performance

In part because of delays in EPA guidance on how to prepare poison runoff control programs, many state plans were late, incomplete, or both. EPA's guidance included virtually no new ideas on how to control poison runoff. As a result, most of the state plans simply catalog preexisting nonpoint source control programs -- a "business as usual" approach that will do little to reverse the problem of poison runoff. The approach that EPA should have taken will be explained in NRDC's forthcoming book -- Poison Runoff: A Guide to State and Local Control of nonpoint Source Pollution.

CONCLUSION - CONGRESSIONAL OVERSIGHT IS NEEDED

EPA's performance in implementing the key requirements of the 1987 Water Quality Act has been extremely poor. EPA has missed, or is likely to miss, virtually all of the major deadlines included in the 1987 law. Worse, many of the actions EPA has taken violate the letter or spirit of the 1987 Act.

In order to get EPA back on track, Congressional Committees with responsibility to oversee EPA's compliance with the Clean Water Act should conduct detailed oversight hearings this summer. Hearings could be scheduled to coincide with the midpoint of the Clean Water Act reauthorization schedule (August, 1989).

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Deadlines in the Water Quality Act of 1987 - Timeline

This timeline sets out all deadlines for reports, regulations and compliance that were included in the 1987 CWA amendments, except for Title II, Construction Grants

CWA: Clean Water Act of 1977
WQA: Water Quality Act of 1987, amending the Clean Water Act
Parenthetical abbreviations following titles indicate parties to whom deadlines apply.

1986

NOVEMBER

11/30/86 - Sludge Toxics Identification and Proposed Regulations (EPA) --Administrator shall identify toxics in sludges affecting human health or environment and regulations specifying acceptable practices for toxic sludge disposal
(WQA Sec. 406(a)(3) amending CWA Sec. 405(d) by adding Sec. 405(d)(2)(A)(i))

DECEMBER

12/15/86 - Promulgate NPDES Requirements (EPA)--Administrator shall promulgate procedures for approval of state NPDES programs which include requirements for sewage sludge regulations.
(WQA Sec. 406(c) amending CWA Sec. 405 by adding Sec. 405(f)(1))

12/31/86 - Organic Chemicals Regulations (EPA)--Final effluent limitation regulation shall be promulgated for the ORGANIC CHEMICALS AND PLASTICS AND SYNTHETIC FIBERS category.
(WQA Sec. 301(f))

Pesticides Regulations (EPA)--Final effluent limitation regulation shall be promulgated for the PESTICIDES category.
(WQA Sec. 301(f))

1987

JANUARY

FEBRUARY
2/4/87 - DATE OF ENACTMENT - Water Quality Act of 1987, Pub. L. 100-4, 101 Stat. 7.

MARCH
3/4/87 - Ocean Discharge Modification (POTW)--Deadline for POTW that was using another POTW's capacity of ocean outfall before 12/31/82 to apply for a 301(h) (marine discharge) modification in its own right.
(WQA Sec. 303(f) amending CWA Sec. 301(j)(1)(A))

APRIL

MAY

JUNE

JULY
7/31/87 - Sludge Toxics Identification and Proposed Regulations-- Administrator shall identify and propose regulations for toxics posing hazard in sludge not identified in previous identification procedures.
(WQA Sec. 406(a)(3) amending CWA Sec. 405(d) by adding Sec. 405(d)(2)(B)(i))

AUGUST
8/3/87 - Treatment Works Permit Modification (POTW)--Deadline by which a POTW unable to complete construction within time required or for which the U.S. has not made financial assistance available in time (and which is not subject to compliance schedule by court order or final administrative order prior to Date of Enactment) must file request to extend time of compliance (to achieve limitations under 301(b)(1)(B) or 301(b)(1)(C))
(WQA Sec. 304(a) amending CWA Sec. 301(i)(1))

- Phosphate Fertilizer Effluent Limitation (EPA)--The Administrator shall issue permits based on Best Professional Judgement (BPJ) to specified facilities of the phosphate subcategory of the fertilizer manufacturing point source category.
(WQA Sec. 306(c)(2)) (See 100th Cong., 1st Sess., H.Con.Res.24, 1/8/87)

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(House Concurrent Resolution clarifies WQA Sec. 306 with respect to Louisiana fertilizer plants. The Con. Res. explicitly states that the provision is not intended to alter or interfere with EPA's authority under CWA Sec. 402.)

8/4/87 - Fundamentally Different Factors (FDF) Reports (EPA)--6 months after Date of Enactment and every 6 months thereafter, EPA must submit to the jurisdictional committees in both Chambers of Congress a report of the status of applications for Fundamentally Different Factors variances--i.e.,applications for alternative requirements which modify the requirements of effluent limitations under 301 or 304 or any national categorical pretreatment standard under 307(b).
(WQA Sec. 306(a) amending CWA Sec. 301 by adding Sec. 301(n))

8/31/87 - Sludge Management Practice Regulations (EPA)--Promulgate regulations specifying sludge management practices and numerical limitations.
(WQA Sec. 406(a)(3) amending CWA Sec. 405(d) by adding Sec. 405(d)(2)(A)(ii))

SEPTEMBER

OCTOBER

10/1/87 - Great Lakes Plan (EPA)--Before October 1 of each year, the Great Lakes National Program Office and the Great Lakes Research Office shall prepare a joint research plan for the fiscal year which begins in the following calendar year.
(WQA Sec. 104 creating CWA Sec. 118(e)(1))

NOVEMBER

11/4/87 - Toxic Hotspot Guidance (EPA)--Administrator will issue guidance on identifying hotspots.
(WQA Sec. 308(c) amending CWA Sec. 304 by adding Sec. 304(a)(7))

DECEMBER

12/29/87 - Great Lakes Report (EPA)--Within 90 days after the end of each fiscal year, the Administrator shall submit to Congress a comprehensive report on the status of various elements of the Great Lakes water quality management program.
(WQA Sec. 104, creating CWA Sec. 118(c)(6))

12/31/87 - Dam Water Quality Study (EPA)--Administrator shall report to Congress on quality of navigable waters due to impoundment of water by dams. (WQA Sec. 524)

1988

JANUARY

1/1/88 - State Annual Nonpoint Source (NPS) Status Report--January 1, 1988 and every January 1 thereafter the Administrator shall submit NPS status/progress report to both Congressional committees on status and progress in state NPS programs (WQA Sec. 316(a) creating CWA Sec. 319(m)(1))

FEBRUARY

2/4/88 - 1 YEAR AFTER DATE OF ENACTMENT

- Chesapeake Bay Plan (State)--A State wanting to receive a grant for purposes of implementing the management mechanisms in the Chesapeake Bay Program must approve and commit to all or substantially all aspects of the Program's management plan. (WQA Sec. 103, creating CWA Sec. 117(b)(1))

- FDF Report (EPA) (see 8/4/87)

- Effluent Guidelines Review (EPA)--12 months after Date of Enactment and biennially thereafter, the Administrator shall publish in the Federal Register a plan:

  -- to establish a schedule for annual review and revision of promulgated effluent guidelines (BAT, BCT)

  -- identify categories of sources discharging toxic or nonconventional pollutants for which guidelines have not been previously published under 304(b)(2) (BAT) and 306 (NSPS).

2/4/88
cont'd

-- establish a schedule for promulgation of effluent guidelines for categories identified in paragraph above: promulgation of guidelines shall not be more than 4 years after enactment for categories identified in the first published plan (Effluent Guidelines I) or 3 years after publication of plan for categories identified in later published plans (Effluent Guidelines II).
(WQA Sec. 308(f) amending CWA Sec. 304 by adding Sec. 304(m)(1))

- Clean Lakes Restoration Guidance (EPA)--1 year after Date of Enactment and biennially thereafter, the Administrator shall publish a guidance manual to guide states in lake restoration and improvement.
(WQA Sec. 315(c) amending CWA Sec. 304(j))

- Indian Tribes Sewage Treatment Plant Report (EPA) --Administrator shall submit report to Congress on needs of Indian tribes for sewage treatment plants and how Administrator intends to provide assistance, etc.
(WQA Sec. 506 amending CWA by adding new Sec. 518(b))

- De Minimis Study (EPA)--Administrator shall submit to both Congressional committees a report on results of study on de minimis sources and appropriate methods to regulate them.
(WQA Sec. 516)

- Innovative and Alternative Technology Report (EPA)--Administrator shall submit to both Congressional committees a report and recommendations on effectiveness on waste treatment of innovative and alternative technology in POTWs.
(WQA Sec. 517)

- Testing Procedures Report (EPA)--Administrator shall submit to both Congressional committees a report and recommendations on testing procedures for analysis of pollutants under 304(h).
(WQA Sec. 518)

2/4/88 cont'd - Sulfide Study (EPA)--Administrator submits report on study regarding the corrosivity of sulfide in treatment systems and effectiveness of pretreatment standards or other options to deal with effects.
(WQA Sec. 522)

- Rainfall Infiltration Study (EPA)--Administrator submits report to Congress on study regarding rainfall infiltration to E. Bay Municipal Utility District, CA.
(WQA Sec. 523)

2/5/88 - Pending Applications for 301(g) Permit Modifications for Nonconventionals (EPA)--Applications pending on the Date of Enactment for a modification with respect to the discharge of ammonia, chlorine, color, iron, or total phenols (4AAP) under 301(g) must be dis/approved by the Administrator.
(WQA Sec. 302(e)(2))

MARCH

APRIL

4/1/88 - Clean Lakes Reports (States)--Beginning April 1, 1988, each state (seeking grant assistance) shall biennially prepare a report as part of its regular biennial report on water quality, under CWA Sec. 305(b)(1):

-- identifying and classifying eutrophic conditions of lakes in the states;
-- describing of procedures, processes, and methods to control sources of pollution to lakes;
-- methods/procedures to restore lake quality;
-- methods/procedures to mitigate high acidity, and the effects of other toxics (metals, etc.) due to acidity;
-- list of publicly owned lakes with use impairments and WQS violations;
-- assessment of status and trends in lake water quality.

(WQA Sec. 315(a) amending CWA Sec. 314(a)(1) and Sec. 314(a)(2))

MAY

JUNE

6/15/88 - Sludge Management Practice Regulations (EPA)--Administrator shall promulgate regulations establishing management practices and numerical criteria for toxics in sludge not previously identified and regulated.
(WQA Sec. 406(a)(3) amending CWA Sec. 405(d) by adding Sec. 405(d)(2)(B)(ii))

At least every 2 years Administrator shall review regulations to make sure they are adequate, and update if necessary.
(WQA Sec. 406(a)(3) amending CWA Sec. 405(d) by adding Sec. 405(d)(2)(C))

JULY

AUGUST

8/4/88 - 18 MONTHS AFTER DATE OF ENACTMENT

- NPS Reports and Management Programs (State)--State must submit to EPA:

1) Report identifying the waters affected by NPS pollution; significant categories of NPS pollution; processes and programs through which state handles NPS problems

2) Management Program which the state will implement for controlling NPS pollution
(WQA Sec. 316 creating CWA Sec. 319(a) and (c)(2))

- Indian Tribes Regulations (EPA)--Administrator shall promulgate final regulations specifying how Indian tribes shall be treated as states under CWA.
(WQA Sec. 506 amending CWA by adding new Sec. 518(e)(3))

- FDF Reports (EPA) (See 8/4/87)

SEPTEMBER

9/27/88 - Clean Lakes Report (EPA)--180 days after states submit WQ report (see 4/1/88) the Administrator shall submit to both Congressional committees a report on water quality in lakes.
(WQA Sec. 315(a) amending CWA Sec. 314(a)(3))

OCTOBER

10/1/88 - Great Lakes Plan (EPA) (See 10/1/87)

- Stormwater Report (EPA)--Administrator shall submit a report to Congress on study of stormwater discharges not requiring permits, etc.
(WQA Sec. 405(a) amendiang CWA Sec. 402 by adding Sec. 402(p)(5)(C))

NOVEMBER

DECEMBER

12/1/88 - Administrative Penalties Report (EPA & Army Corps)--Secretary of the Army and the Administrator shall each submit a report to Congress examining and analyzing enforcement mechanisms, including administrative civil penalties mechanism, and their efficacy. The reports shall contain recommendations for improvement.
(WQA Sec. 314(b))

12/29/88 - Great Lakes Report (EPA) (See 12/29/87)

1989

JANUARY

1/1/89 - State Annual NPS Status Report (EPA) (See 1/1/88)

FEBRUARY

2/4/89 - 2 YEARS AFTER DATE OF ENACTMENT

- Toxic Hotspot Report & Strategy (State)--States must submit a list of the following to the Administrator for review, approval, and implementation:

1. waters not meeting WQS due to toxics

2. specific point sources causing impairment

3. for each impaired segment, individual control strategies that the state determines will reduce the discharge of toxic pollutants and will lead to the achievement of applicable water quality standards (compliance with strategy 3 years after strategy established - see 2/4/92).
(WQA Sec. 308(a) amending CWA Sec. 304 by adding Sec. 304(l)(1))

2/4/89 cont'd

- Information on Water Quality Criteria (EPA)--The Administrator shall develop and publish information on methods for establishing and measuring water quality criteria for toxics on other bases than pollutant-by-pollutant criteria, including biomonitoring and assessment methods. (WQA Sec. 308(c) amending CWA Sec. 304(a) by adding Sec. 304(a)(8))

- Administrative Action - NPS Plans, Reports & Programs (EPA)--EPA dis/approves and notifies state of revisions and modifications to NPS Plans, Reports and Programs submitted by state 8/4/88. (WQA Sec. 316(a) creating CWA Sec. 319(d)(1))

- Antibacksliding Report (EPA)--Administrator submits report and recommendations to Congress on a study about the extent to which states have adopted WQS and on NPDES program. (WQA Sec. 404(c))

- Stormwater Regulations - Industry & Large Cities (EPA)--Administrator shall establish final regulations for permit application requirements for stormwater discharges from industrial activity and cities from separate storm sewers in greater than 250,000. (WQA Sec. 405(a) amending CWA Sec. 402 by adding CWA Sec. 402(p)(4)(A))

- Aquifer Study (EPA)--Administrator shall submit report to Congress on studies of point and nonpoint pollution to specified aquifers. (WQA Sec. 520)

- FDF Reports (EPA) (See 8/4/87)

MARCH

3/31/89 -

- Priority Toxics--BAT Compliance--Compliance with Best Available Technology Economically Achievable (BAT) effluent limitations shall be achieved for PRIORITY TOXIC POLLUTANTS. (WQA Sec. 301(a), amending CWA Sec. 301(b)(2)(C))

- Other Toxics--BAT Compliance--Compliance with Best Available Technology Economically Achievable (BAT) effluent limitations shall be achieved for OTHER TOXIC POLLUTANTS (those listed in 307(a)(1) but not listed in 301(b)(2)(C)). (WQA Sec. 301(b) amending CWA Sec. 301(b)(2)(D))

3/31/89 cont'd

- Conventional Pollutants--BCT Compliance--Best Conventional Pollutant Control Technology shall be achieved for CONVENTIONAL POLLUTANTS.
(WQA Sec. 301 (c) amending CWA Sec. 301(b)(2)(E))

- All Other Pollutants--BAT Compliance--Compliance with Best Available Technology Economically Achievable shall be achieved for NON CONVENTIONAL POLLUTANTS.
(WQA Sec. 301(d) amending CWA Sec.301(b)(2)(F))

- Stricter BPT Compliance--Compliance with stricter Best Practicable Control Technology currently available (BPT) shall be achieved.
(WQA Sec. 301(e) amending CWA Sec. 301(b) by adding Sec. 301(b)(3)(A))

- BPJ Permits Compliance--Compliance with permits written only on the basis of Sec. 402(a)(1) (i.e., permits based on best professional judgement (BPJ)) shall be achieved.
(WQA Sec. 301(e) amending CWA Sec. 301(b) by adding Sec. 301(b)(3)(B))

APRIL

MAY

5/4/89 - State Revised NPS Plans (States)--State submits revised NPS program if EPA has required such modifications before approval (see 2/4/89).
(WQA Sec. 316(a) creating CWA Sec. 319(d)(2)(D))

JUNE

6/4/89 - Administrative Action on Toxic Hotspot Strategy (EPA)--Administrator dis/approves state control strategy for toxic hotspots (see 2/4/89).
(WQA Sec. 308(a) amending CWA Sec. 304 by adding Sec. 304(l)(2))

6/15/89 - Sludge Regulations Compliance/Toxic Sludge Regulation Compliance w/ Construction (POTW)--Regulations shall require compliance by this date, unless construction is required, in which case, compliance must be within 2 years of publication (see 6/15/88).
(WQA Sec. 406(a)(3) amending CWA Sec. 405(d) by adding Sec. 405(d)(2)(D))

JULY

AUGUST
8/4/89 - Administrative Action NPS Revised Programs (EPA)--Administrator dis/approves state NPS program revision (see 8/4/88, 2/4/89 and 5/4/89). (WQA Sec. 316(a) creatin CWA Sec. 319(d)(2)(D))

- FDF Report (EPA) (See 8/4/87)

- EPA Report on State NPS Programs (if necessary)--If state does not submit report, EPA prepares a report assessing NPS situation. (WQA Sec. 316(a) creating CWA Sec. 319(d)(3))

SEPTEMBER

OCTOBER
10/1/89 - Great Lakes Plan (EPA) (See 10/1/87)

- Stormwater Control Report (EPA)--Administrator shall submit report to Congress on study of procedures and methods to control stormwater discharges to protect water quality. (WQA Sec. 405(a) amending CWA Sec. 402 by adding Sec. 402(p)(5)(C))

NOVEMBER

DECEMBER
12/29/89 - Great Lakes Report (EPA) (See 12/29/87)

1990

JANUARY
1/1/90 - State Annual NPS Status Report (See 1/1/88)

- NPS Report to Congress (EPA)--The Administrator shall submit to Congress final NPS Report describing:

-- the success of programs implemented by states

-- the success of states to adhere to schedules and implementing BMPs

-- grants awarded

-- further actions needed

-- recommendations for future programs

1/1/90 cont'd -- activities which are inconsistent with management programs (WQA Sec. 316(a) creating CWA ec. 319(m)(2))

FEBRUARY

2/4/90 - 3 YEARS AFTER DATE OF ENACTMENT

- Stormwater Permit Application - Industry and Large Cities (local)--Permit applications filed for industry and large city stormwater outfalls. (WQA Sec. 405(a) amending CWA Sec. 402 by adding Sec. 402(p)(4)(A))

- Effluent Guidelines Review (EPA) (See 2/4/88)

- Clean Lakes Restoration Guidance (EPA) (See 2/4/88)

- FDF Report (EPA) (See 8/4/87)

MARCH

APRIL

4/1/90 - Clean Lakes Report (States) (See 4/1/88)

MAY

JUNE

6/4/90 - Admin. Toxic Hotspot Control Strategy, (if necessary)--If state fails to submit control strategy or EPA does not approve strategy submitted, then the Administrator shall implement lists and control strategy. (WQA Sec. 308(a) amending CWA Sec. 304 by adding Sec. 304(l)(3))

6/15/90 - Toxic Sludge Regulations Compliance (w/construction) (See 6/15/89)

JULY

AUGUST

8/4/90 - FDF Report (EPA) (See 8/4/87)

SEPTEMBER

9/27/90 - Clean Lakes Report (EPA) (See 9/27/88)

OCTOBER

10/1/90 - Great Lakes Plan (EPA) (See 10/1/87)

NOVEMBER

DECEMBER
12/29/90 - Great Lakes Report (EPA) (See 12/29/87)

1991

JANUARY
1/1/91 - State Annual NPS Status Report (EPA) (See 1/1/88)

FEBRUARY
2/4/91 - 4 YEARS AFTER DATE OF ENACTMENT

- Effluent Guidelines I (EPA) (See 2/4/88)--Guidelines promulgated for categories identified in Effluent Guidelines Review completed 2/4/88.

- Administrative Action - Stormwater Permit Industry and Large Cities (EPA)--Administrator will issue/deny stormwater permits for industry and large cities (see 2/4/90).
(WQA Sec. 405(a) amending CWA Sec. 402 by adding Sec. 402(p)(4)(A))

- Stormwater Regulations - Mid-sized Cities (EPA)--Administrator shall establish regulations for stormwater outfalls in cities with population between 100,000 and 250,000
(WQA Sec. 405(a) amending CWA Sec. 402 by adding Sec. 402(p)(4)(B))

- FDF Report (EPA) (See 8/4/87)

- Pretreatment Study--Administrator will submit report and recommendations on:

  -- adequacy of data on impacts of toxics from POTWs
  -- effectiveness of toxic removal at POTWs
  -- capability of POTWs to revise pretreatment requirements
  -- general pretreatment effectiveness

  (WQA Sec. 519)

MARCH
3/31/91 - Innovative Technology Compliance Deadline (Industry) (301(k))--Any facility with a 301(k) compliance extension (using an innovative production process or control technique which has potential for industry wide application) must comply with BAT and BCT standards (2 years after the March 31, 1989 BAT and BCT compliance deadlines for other industries in the category.)
(WQA Sec. 305(a) amending CWA Sec. 301(k))

APRIL

MAY

JUNE

JULY

AUGUST
8/4/91 - FDF Report (EPA) (See 8/4/87)

SEPTEMBER

OCTOBER
10/1/91 - Great Lakes Plan (EPA) (see 10/1/87)

NOVEMBER

DECEMBER
12/29/91 - Great Lakes Report (EPA) (See 12/29/87)

1992

JANUARY
1/1/92 - State Annual NPS Status Report (State) (See 1/1/88)

FEBRUARY
2/4/92 - 5 YEARS AFTER DATE OF ENACTMENT

- Clean Lakes Restoration Guidance (EPA) (See 2/4/88)

- Toxic Hotspot Control (States)--States must comply with strategy set out in 2/4/89 report. (See 2/4/89)

- Stormwater Permit Applications - Mid-sized Cities --Applications to be filed for stormwater outfalls in cities with populations of 100,000 to 250,000. (WQA Sec. 405(a) adding CWA Sec. 402(p)(4)(B))

- Effluent Guidelines Review (EPA) (See 2/4/88)

- FDF Report (See 8/4/87)

MARCH

APRIL
4/1/92 - Clean Lakes Reports (States) (see 4/1/88)

MAY

JUNE

JULY

AUGUST
8/4/92 - FDF Report (see 8/4/87)

SEPTEMBER
9/27/92 - EPA Clean Lakes Report (See 9/27/88)

OCTOBER
10/1/92 - Stormwater Permits Required--After October 1, 1992 permits for stormwater discharges may be required. (WQA Sec. 405(a) amending CWA Sec. 402 by adding CWA Sec. 402(p)(1))

- Stormwater Regulations (EPA)--Administrator shall issue regulations based on water quality, including a comprehensive program and deadlines. (WQA Sec. 405(a) amending CWA Sec. 402 by adding Sec. 402(p)(6))

- Great Lakes Plan (EPA) (see 10/1/87)

NOVEMBER

DECEMBER
12/29/92 - Great Lakes Report (EPA) (see 12/29/87)

1993

JANUARY
1/1/93 - State Annual NPS Status Report (State) (see 1/1/88)

FEBRUARY
2/4/93 - 6 YEARS AFTER DATE OF ENACTMENT

- Effluent Guidelines II (EPA) (See 2/4/88)--Guidelines promulgated for categories identified in Effluent Guidelines Review completed 2/4/90.

- Administrative Action - Stormwater Permit - Mid-sized Cities--Administrator shall issue/deny stormwater permits for cities with populations of 100,000 to 250,000.
(WQA Sec. 405(a) adding Sec. 402(p)(4)(B))

- FDF Reports (EPA) (see 8/4/87)

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STATEMENT OF

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ON BEHALF OF THE

WATER POLLUTION CONTROL FEDERATION

BEFORE THE

SUBCOMMITTEE ON ENVIRONMENTAL PROTECTION

SENATE ENVIRONMENT AND PUBLIC WORKS COMMITTEE

OVERSIGHT HEARING ON THE WATER QUALITY ACT OF 1987

June 16, 1989

PRESIDENT	PRESIDENT-ELECT	VICE PRESIDENT	TREASURER	PAST PRESIDENT	EXECUTIVE DIRECTOR
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Testimony of Robert A. Reich
Water Pollution Control Federation
Senate Environmental Protection Subcommittee
June 16, 1989

Good morning. My name is Bob Reich. I am a registered professional engineer in the State of Delaware, and a consultant in the field of water pollution control in the Engineering Department of the Du Pont Company. I am here today on behalf of the Water Pollution Control Federation (WPCF), a non-profit educational and technical organization whose 36,000 members are civil and environmental engineers, wastewater treatment plant operators and managers, state and municipal officials, and many others working in Federal agencies, industry, academia or private practice to improve water quality. Water quality - particularly as it relates to toxics -- is certainly the topic of the day; not only here but throughout the Nation. The provisions of Section 304(1), which were added to the Clean Water Act by the Water Quality Act of 1987, are a reflection of the country's concerns.

WPCF was a strong proponent of the 1987 Amendments. The Federation has been a staunch supporter of the control and elimination of toxic substances in toxic amounts in wastewater discharges. The success of technology-based controls on conventional pollutants, largely a result of Congressional action in the 1970's and active implementation by water pollution control professionals over the last decade-and-a-half, enable us now to concentrate our efforts on the toxics control problem. Congress

predicted this next phase of water pollution control, and rightly emphasized toxics control in these 1987 Amendments.

We must point out, however, that regulations to control toxics have been developed in a piece-meal fashion that does not do justice to the priority Congress has placed on the issue. The sources of toxics are varied and not easily identified in most cases, and toxics control is not a simple engineering function. Preliminary information indicates that a large number of wastewater discharges will need to be evaluated for toxicity, and that this assessment and any subsequent control programs will be very site-specific in nature. The problem is exacerbated by the promulgation of toxic control requirements in several different regulations, such as the Domestic Sewage Study proposal and the 304(1) regulation.

In addition, technical support from EPA is not keeping pace with the regulatory demand for and use of permit limits on toxics. This situation leaves many dischargers in a position of having permit limits to control toxicity from substances that they cannot identify and have no way of controlling.

In constructing Section 304(1), Congress wisely recognized a number of key, though somewhat subtle, points in assessing and controlling toxics based on water quality concerns. These points are:

(1) Water quality could be expected to improve upon implementation of Best Available Technology (BAT), which had not been fully implemented at the time of enactment and is not yet fully implemented due to delayed promulgation of effluent limitations guidelines for certain categories of industry. Section 304(1) required

that such implementation be taken into account in the water quality impairment assessments.

(2) Water quality assessments and control strategies are best handled by the States, which Congress had previously charged with the duty to set the water quality standards upon which the assessments and controls would be based.

(3) There is a need for a consistent national approach. Congress therefore required EPA, under newly added paragraph (7) of Section 304(a), to provide guidance to the States on identifying the impaired waters.

Having designed the specific provisions of Sec. 304(l) so carefully, Congress then -- in a well-meaning effort to address a national concern about "toxic hot spots" -- set forth a time schedule which hindered the sequential development of assessments and controls. As a result, States have been forced to act with extremely limited data, generally few numerical water quality standards, and little public input. Despite the rush, some deadlines set forth in Section 304(l) have been missed. For instance, EPA's final guidance to the States was issued four months late and their implementing regulations were issued just this month - four months after the States' deadline for submitting their lists and Individual Control Strategies; also, a number of States missed the February 4, 1989 deadline.

We understand the Senate version of the 1987 Water Quality Act originally allowed more time for completion of these tasks: two years to develop the lists of impaired waters and an additional two years to develop the Individual Control Strategies. An expanded time frame would have alleviated some of the pressure on the States, although even more time should have been allowed to perform the water quality assessments, as well. Such timing would

have enabled the four following critical activities to be accomplished:

(1) **Water body sampling.** Very few stream segments have been monitored for a complete list of Section 307(a) priority pollutants, and even fewer have a well-developed data base for such pollutants. Consequently, the water quality assessments are primarily based on discharge monitoring report data, permit application data, or permit limits which tend to maximize estimated loadings to the stream and may not truly represent current actual discharge levels. Dilution studies of the discharge are usually worst-case assessments which do not take into account actual river conditions or natural reduction processes such as assimilation, or in-stream transformation of the compounds. The effect of employing multiple worst-case scenarios is that waters are likely to be unnecessarily listed and dischargers are likely to be unfairly burdened with costly Individual Control Strategy requirements.

(2) **Development of water quality standards.** Because most States have few numerical standards for toxic pollutants, EPA directed the States to use EPA water quality criteria or criteria documents in assessing impairment of waters. The EPA criteria were not subject to rulemaking procedures and are not water body specific. Accordingly, States are assessing waters based on criteria which have not been tailored to the needs of the particular region or water body and have not received the public input required by Congress under Section 303(c)(1). There should be even greater concern if any of the assessments have been based on one of the dozens of pollutant values listed in EPA's "Quality Criteria for Water" (1986), which the Agency itself has recognized were based on insufficient data.

(3) **Implementation of Best Available Technology (BAT).** Few states have had sufficient resources or time to complete the issuance of their BAT permits, let alone have them fully implemented. At minimum, draft BAT permits should have been developed to determine the improvements which will have accrued for waters presently believed to be impaired.

(4) **Public participation.** Although EPA strongly encouraged it through its guidance on 304(l), few states found it possible to provide time or information to enable public input on the methodology for assessing waters and developing Individual Control Strategies or public review of the various lists to correct errors. EPA apparently

recognized this shortcoming. The recent notice of Individual Control Strategy approvals and disapprovals allows a four month comment period. The Federation supports a period of public input and hopes that Congress or EPA can find a way to allow for the impact it will have on implementation.

In addition to recognizing the additional time needed to adequately confirm and finalize the water quality assessments and Individual Control Strategies, Congress or EPA should consider how the entire 304(1) program can be integrated most efficiently into State and Federal permitting programs, and into municipal and industrial planning. Permits generally are issued on a five-year cycle, in accordance with Section 402(b)(1). States and EPA Regions set priorities and allocate their resources allowing for this cycle; industries and municipalities budget for capital improvements and operations based on an assumption that targets will not be shifting constantly. Yet, a number of associated programs are being implemented near-term on somewhat differing schedules -- programs such as BAT permitting, the 304(1) requirements and stormwater permitting.

With the exception of discharges to certain, obviously impaired waters, we believe the toxics program -- as well as these others -- generally should be integrated into the regular cycle of Section 402(a) permitting. At a minimum, EPA should be encouraged to provide guidance to permitting authorities on integrating all current water permitting programs to avoid the need for disruptive and costly reopening of permits. If permits are reopened to address the priority pollutants under 304(1), any other pollutants of concern should be addressed at the same time. This way, a new

five-year permit could be issued, and discharger and permit writers will not be faced with reopening the same permit after just two or three years.

Congress also should recognize a necessary time frame for compliance with the permits developed based on Individual Control Strategies. For direct discharging industries, a three-year compliance schedule should be anticipated from the time that limits are incorporated into a discharge permit in order that the permittee can determine the sources, pollutant levels and appropriate control technologies, design the treatment or minimization systems, and construct and start-up the facilities. For a publicly-owned treatment works (POTW), more time may be needed because in many cases the Individual Control Strategy limits must be transferred into necessary restrictions on the indirect discharger. Accordingly, the POTW must identify the contributing sources of the pollutants of concern and implement appropriate pretreatment limits which will lead into a three-year compliance period similar to that just described for direct discharging industries.

One additional point I would like to make relates to nonpoint source pollution. I know another panel today is focusing exclusively on this issue, but I would like to reiterate WPCF's strong support of funding for the Sec. 319 program, which is pending before the appropriations committees. As EPA's recently released data indicate, the vast majority of the 17,000 stream

segments that are impaired due to toxics are impaired as a result of nonpoint source discharges.

EPA is implementing 304(l) as a strictly point source program; however, just-released 304(l) data highlight the need for greater resources to implement nonpoint source programs. We are concerned that the Administration's proposal to fund nonpoint source programs by earmarking 106 management funds will amount to nothing more than "robbing Peter to pay Paul" and will place an even greater strain on the States as they struggle to implement many other new responsibilities, such as 304(l).

In summary, the technical foundation and language of the 304(l) provisions appear to have been right on the mark. The timing set forth by Congress -- while characterized by some as "ambitious" -- has required Herculean efforts on the part of the States and EPA simply to comply with the deadlines. Consequently, it has led to inaccurate and potentially unfair assessments to date. Unless a mid-course correction can be implemented, the provisions not yet implemented will lead to unachievable schedules for permitting and compliance.

As I mentioned previously, WPCF has many scientists and engineers who have extensive experience in water pollution control. The Federation has commented on several pending regulations, and we are proud of our cooperative relationship with EPA.

I appreciate having the opportunity to testify before you today and will gladly try to answer any questions you may have.

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TESTIMONY

before the

U.S. SENATE

SUBCOMMITTEE ON ENVIRONMENTAL PROTECTION

Oversight Hearings

June 16, 1989

William K. Norris

Chairman, Government Affairs

North American Lake Management Society

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TESTIMONY

June 16, 1989

Thank you for the invitation to appear before this subcommittee today. The Society is very concerned with the effects of nonpoint source pollution on water quality. We believe it is essential that this nation develop programs to control nonpoint sources of water pollution, because the quality of a lake or reservoir directly reflects what goes on in its watershed.

This is the second time that we have appeared before this subcommittee to specifically testify on the issue of nonpoint source pollution. We first testified on July 19, 1983 as part of the reauthorization hearings of the Clean Water Act. In that testimony we argued for a more accountable program to control nonpoint sources than was finally enacted as section 319 of the Water Quality Act of 1987. We argued that any national program would have to be set up with clear milestones to measure progress.

We emphasized that progress wasn't necessarily the amount of money spent or the volume of pollution reduced, but instead the improvement in water quality as measured by a return to designated uses or adherence to water quality standards. We also noted that existing water quality standards were inadequate to control sedimentation, eutrophication, and toxic contamination of lakes, embayments, and estuaries--and that most of these effects are caused by nonpoint sources.

We advocated a strong program of public education and involvement to help citizens understand their relationship to nonpoint pollution and its prevention. We also encouraged citizen involvement in keeping government agencies honest and accountable in the implementation of basic regulations to protect water quality, including the control of nonpoint sources.

And we emphasized that it would take new federal cost sharing with states and local governments to solve the problem. Progress since 1983 has been very disappointing.

The 1988 305 (b) reports from the states reveal that nonpoint sources represent approximately 85 percent of the remaining water quality problems in the country. The 1988 Clean Lakes Report to Congress shows that we have hardly begun to slow the degradation of the nation's lakes: nearly 45 percent of the nation's assessed lakes are impaired or threatened by pollution, with 75 percent of that nonpoint pollution. Nineteen of the 25 states reporting are measuring impaired uses in their lakes from metals, inorganics, priority pollutants, and pesticides.

This underscores that the problems with lakes and impoundments are now attributable to more than just eutrophication. In 1971, state water administrators indicated only seven lakes nationwide were experiencing toxics problems. Today, the numbers are in the hundreds. Kansas in its 1988 305(b) submission flatly states that all of its lake use impairment is derived from toxics pollution.

In Massachusetts, since 1980 alone, the total number of closed shellfish beds has risen by 30 percent--a total economic loss of about $94.5 million annually for the state. This increase correlates with increased development of coastal property that began in the 1970s. For example, in the town of Fairhaven 11 housing permits were issued in 1980; that jumped to 30 permits in 1987, with a total of 392 permits issued in 1980-87. In nearby Buzzards Bay, the acreage closed to shellfishing has consistently increased during that time: from 4,358 in 1970 to 8,052 in 1980 to 11,179 in 1987.

In the past, we have studied the problem too much. We spent more than $600 million in the late 1970s on section 208 studies, but we failed to follow through. We have spent too much of the federal dollar to give everyone a little bit of money to make them happy, rather than targeting it to priority problems or significant national demonstrations that will convince the public that the problem can be solved. This is particularly troublesome with the USDA programs, but they are not alone.

There really is no mechanism to hold EPA accountable for enforcing improvements in water quality that has been affected by nonpoint source pollution. For the most part, standards are totally inadequate to control eutrophication or sedimentation of lakes and impoundments.

Cross compliance of government programs is a joke, yet it may be the single most damning aspect of the nonpoint source problem. It doesn't make a lot of sense to provide millions of dollars to dredge a channel in a river to control flooding when

the sources of the problem are not controlled in the watershed. This is exactly what we are doing is such cases as the Obion-Forked Deer watersheds in western Tennessee. The taxpayer is paying more than $100 million to dredge the river while we supply the farmer with crop subsidies to grow more in the watershed on land that is erosive.

We will have spent about $16 billion on the Conservation Reserve Program when its first phase is completed. It wasn't carefully targeted for water quality protection and improvement. It was based more on the willingness of the farmer to take the money and the price per acre offered. As a result, we will have taken a lot of marginal land out of production, but multipurpose targeting that included strong water quality improvement objects could have made the expenditure much more effective.

Other large grant programs offered by the federal government should also be carefully integrated with nonpoint source control programs--such as HUD block grants and highway construction grants. Not only should these grants not be awarded if they contribute to nonpoint source pollution, but they should not be awarded to states and localities where nonpoint source pollution impairs water quality and usage.

We have reviewed some of the first drafts of 319 state management plans and resulting EPA comments, and find that EPA is not criticizing sufficiently omissions such as failure to target resources for water quality infractions or exemptions to state water quality control laws for forestry and agriculture. Nor is EPA emphasizing the need for cross compliance or paying enough attention to dam discharges.

Our comments are not a criticism of EPA staff per se, but of the fact that the agency doesn't have the resources to address the problem. Headquarters staff has dwindled to a mere handful, and funding to the states has been reduced. The agency is in no position to develop a meaningful, quantifiable, enforceable program when it is forced to fight fire drills on budget and Congressional inquiry. On top of that, EPA's entire Water program has declined by perhaps a third in real spending power since the beginning of the decade.

The opportunity to control nonpoint source pollution exists now: we support the following actions to develop programs necessary for its control:

- Elevate the nonpoint and lakes programs to Office level at EPA where they will command the attention of the Assistant Administrator for Water, and have equal opportunity to compete for resources and policy. Such a move will ensure that enough staff and resources are dedicated to the program both at headquarters and in

the regions. For instance, more than one staffer per region would be assigned to the program. It will help ensure a greater communication and integration within EPA's programs and send a signal to other federal agencies that indeed the issue has risen on the agenda of water quality issues. On the other hand, if these programs remain buried in the bureaucracy, we see little chance of achieving the goals of the program as laid out in the recently developed National Nonpoint Agenda.

- Follow through on the National Nonpoint Source Agenda recommendations.

- Support mandatory cross-compliance procedures. No grants should be awarded by any federal agency until they are certified by the receiving state that the location has no nonpoint source problems or that they are being addressed in an approved timeframe as included in the state 319 plan.

- Establish a uniform, trackable framework for revising the 319 plans.

- Make quantifiable wr quality goals with defined milestones the basis of the 319 plans. Make the plans enforceable by EPA, i.e., if the objectives are not being met, EPA could remove the program from the state and administer it.

- Give EPA strong oversight and enforcement powers.

- Eliminate agriculture and forestry exemptions in state water laws.

- Fully fund the section 319 demonstrations. $100 million/year for four years is not unreasonable. It would help initiate stable state programs and firmly establish national leadership. Such action would help EPA reorganize and elevate nonpoint in the agency to Office level. Comprehensive demonstrations such as the Land and Water 201 program in the southeast can provide an integrated data base of information as reauthorization of the Water Quality Act is considered and debated in the next few years. Perhaps a quarter of any appropriation under section 319(h) should be targeted for use as demonstrations.

- EPA should establish an advisory committee of outside experts and interests to annually review state plans and make recommendations to EPA on strengthening specific state plans. EPA must be willing to accept

the recommendations and apply them or refute them conclusively before awarding the next year's water grants to the states. Such a mechanism will build accountability into the process, something EPA has not yet been able to accomplish.

Again, thank you for the opportunity to testify today. The North American Lake Management Society is most concerned with the issue of nonpoint source pollution, and offer you our assistance in any way you deem appropriate.

CLEAN WATER ACTION

STATEMENT OF ERIC DRAPER
CAMPAIGNS DIRECTOR, CLEAN WATER ACTION

ON IMPLEMENTATION OF SECTION 319 OF THE CLEAN WATER ACT

BEFORE THE

SENATE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
SUBCOMMITTEE ON ENVIRONMENTAL PROTECTION

JUNE 16, 1989

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STATEMENT OF ERIC DRAPER
CAMPAIGNS DIRECTOR, CLEAN WATER ACTION

IMPLEMENTATION OF SECTION 319 OF THE CLEAN WATER ACT

BEFORE THE
SENATE ENVIRONMENT AND PUBLIC WORKS SUBCOMMITTEE ON
ENVIRONMENTAL PROTECTION
JUNE 16, 1989

Thank you Mr. Chairman and Members of Committee for allowing me to make a statement before you. My name is Eric Draper. I direct policy campaigns for Clean Water Action, a 500,000 member citizens environmental group.

My remarks today center on how the U.S. Environmental Protection Agency is implementing Section 319 of the Clean Water Act and what mid-course improvements the Agency could make to improve the likelihood that this vital program works.

I am not optimistic about the success of Section 319, the Nonpoint Source Management Program. We started with an insufficient law -- the amendments failed to establish clear authority and to give EPA a hammer to move the states toward greater controls; EPA issued ineffective guidance to the states which further weakened resolve to deal aggressively with nonpoint pollution sources; and the states have reacted in an expected manner, sending to EPA Assessments and Management Plans that skirt the central issue of finding and controlling nonpoint pollution sources to attain water quality goals.

I can safely say that little is being done that would not have already been done without the law. When the 1987 Amendments were passed, state Water Pollution Control Administrators noted the Administration's hostile feelings which mirrored some local business attitudes that since one could not see and not stop nonpoint pollution, you should not do anything about it

Nonpoint sources cause half of the pollution in estuaries, 65% of the pollution in rivers and streams and three-fourths of the pollution in lakes. The categories of nonpoint sources range from agriculture to urban stormwater and include deposition of air pollution, leaking dumps, septic systems and underground tanks. While the pollution from nonpoint sources is most widely distributed, it is rarely concentrated to such a point as to pass point sources on a priority ranking of waters to be cleaned up.

When he vetoed the 1987 Clean Water Act Amendments, President Reagan singled out Section 319 for particular scorn. The President inadvertently got it right and his words are worth

repeating, "Controlling non-point source pollution has the potential to touch in the most intimate ways , practically all of us citizens, whether farmers, business people, or homeowners."

To illustrate this point, two days ago a thunderstorm showered Washington, DC and its suburbs. The next day the city's streets and air were clean -- cleansed of pollution. Exhaust, bits of rubber tires and brake linings, grease, oilpan drippings, animal droppings, construction debris, and garbage were washed from the city and its suburbs into the Potomac River and its tributaries. The farm fields of Virginia and Maryland released tons of soil, fertilizers and herbicides. The Lorton dump released more contaminated leachate to mix with the acids washed from abandoned West Virginia and Pennsylvania mines. For the next few days, the Potomac River will be a mess.

When Congress passed the 1972 Clean Water Act, it declared water quality goals for the nation's waters and called for an end to the discharge of pollutants. Nonpoint sources were added as a specific area of control in the 1987 Amendments. However it has always been intended that those pollutants washed by rain or blown by the wind into water be controlled also.

With nonpoint pollution, there is no Exxon Valdez to unite public opinion and get agencies and businesses working together. There are just thousands of small fish kills and millions sources degrading waters. It is easier to identify and control a point source polluter then to change the thousands of daily activities that contribute to nonpoint pollution. Yet that is what the law requires. It may be impossible to include every farmer's field in the NPDES or to require permits for feedlots. It may be challenging to reduce the pollution in runoff from a parking lot. But if those sources of pollution provide large enough loadings to impair water quality, then they must be controlled. Pollution must be controlled regardless of source.

Congress affirmed principle in 1987 when Section 319 was added to the Clean Water Act. But the amendment was flawed before it was targeted for veto. And in implementation, control of sources continues to be elusive.

The Clean Water Act mandates that states control water pollution to meet water quality standards. Section 319 directs EPA to work with the states to develop management programs to control and reduce nonpoint sources, along with control of point sources, to attain water quality goals. The law directs states to:

- Identify surface waters that will not attain or maintain water quality standards because of nonpoint sources,

- Identify categories and subcategories of nonpoint sources

interfering with attaining goals for each water body,

- o Determine Best Management Practices for all types of sources,
- o Develop a process to control and reduce sources and levels of pollution, and
- o Identify state and local nonpoint source pollution control programs.

The 1987 Amendments also authorized a number of funding sources including a $400 million, four year authorization for state grants and set-aside funds from federal municipal sewage treatment grants.

Section 319 gave the states 18 months to report assessments of from nonpoint sources polluted waters and categories of nonpoint pollution, and to submit four year management programs. The Administrator was given six months to approve management programs which could use regulatory or nonregulatory methods of achieving control.

The authorizing language for Nonpoint Source Management could have been stronger. The law provides no mechanism beyond coordination for states to enforce the source controls. Section 319 is a program directed to solve a massive problem with no sticks and, as it now appears, no carrots.

Clean Water Action and other groups have problems with EPA's approach which sent an indirect message to the states that Section 319 would be an "also ran" federal program:

EPA directed states to incorporate Nonpoint Source Pollution Management into State Clean Water Strategies. While this makes sense from a management point of view, it leads to a continued focus on severely impaired waters receiving point source discharges.

EPA established a set of recommendations to deal with the problem of nonpoint which featured public education and voluntary activity. Regulatory approaches were relegated to a backup position.

EPA has yet to request an appropriation for Section 319. The only specific request for nonpoint was for $7 million contained within a request for water quality management grants for FY 1990.

The State Assessments and Management Programs reflect confusion, inaction and disinterest. An informal survey by Clean Water Action revealed that the state staff charged with

implementing the Nonpoint Management Program were low-level personnel with little sense of direction. Assessments, where submitted, are typically collections of previously published documents. Many omit lists of waters. The state management plans, where submitted, are often descriptions of existing programs such as the Soil Conservation Service. Others are long lists of targeted goals for evaluating and studying the problem.

To be fair, there is some very good activity at the state level to control and reduce nonpoint sources of water pollution. But to give credit to the states, it appears to have a momentum separate from Section 319. I found the Washington State plan to be full of specific applications of Best Management Practices (BMPs) to reduce specific sources in individual watersheds and waterways. For example BMPs are in place in Gray's Harbor to confine dairy herds, dispose of manure, and protect streams.

Florida has a new stormwater rule that requires collection of the first inch of rainwater in sediment basins. The collected water cannot be removed until 95% of contaminants are removed. Florida has also regulated its extensive limestone and phosphate mining operations to require controls on wastewater in order to protect surface water and groundwater.

New Jersey estimates that 80% of beach closings are attributable to elevated bacteria from stormwater runoff. More specifically, leaking sewer lines, storm sewers and general accumulated filth are forced into the ocean during heavy summer storms. New Jersey plans to use stormwater detention and infiltration basins to reduce incidents of pollution.

EPA has approved only 3 State Management Programs and has partially approved 6.

Nonpoint source pollution management programs should emphasize a more regulatory approach based on water quality standards and strict source control and reduction. EPA could have recommended a program that included the following elements:

- List waters polluted from nonpoint sources and estimate the total loading of specific pollutants.
- List the individual sources and polluting activities as significant sources and minor sources, and narrate the ways in which the pollutants enter and affect the water body.
- Set target load reductions and assign reductions to specific sources and require controls sufficient to achieve reductions
- Enact laws that mandate intrastate cooperative relationships between governments whose political jurisdictions may not be

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aligned with the regulated watershed.

- o Identify the party responsible for the activity related to each significant source.
- o Require and approve an enforceable BMP for each significant source and activity and require reduced pollutant loadings and impacts.
- o In some cases a BMP might be elimination of the activity or a change in the processes used to conduct the activity.
- o Conduct a program of inspecting and checking the use of the BMPs to see if the activity changes or continues.

Successful nonpoint management programs should emphasize the following ingredients of control:

Reduce Agricultural Pollution by:

Controlling application of nutrients and pesticides.

Creating forested buffers between fields and streams and drainage areas.

Reducing livestock density and restricting locations that are given to rapid rainwater runoff.

Reducing the use of irrigation.

Preserving prime farmland and removing from production marginal farmland from production permanently.

Restricting farm animal access to streams.

Using native species for forage and groundcover.

Reduce suburban and urban runoff by:

Collecting and retaining stormwater.

Controlling land use with planning and zoning.

Requiring site planning review of development.

Requiring building codes applicable to site preparation.

Creating special protection areas and easements.

Enacting coastal zone management and growth controls.

Preventing destruction of wetlands.

Requiring site and watershed drainage and stormwater retention.

Eliminating unnecessary use of non-agricultural nutrients and pesticides on lawns, parks, and right of ways.

Reduce leachate from disposal by:

Controlling land application of wastewater and sludge.

Collecting and treating leachate from landfills and storage areas.

Reducing land disposal of hazardous waste and solid waste.

Reduce other sources by:

Replacing use of salts in road de-icing.

Detecting and replacing defective underground tanks.

Controlling atmospheric deposition through air pollution controls.

Funding nonpoint source management programs is a key to success. The 1987 Amendments authorized several funding sources. The principle source of funds for implementing management programs is the authorization of $400 million for Section 319(h) and 319(i) for fiscal years 1988 through 1991. These funds require management program approval and a 40% state match. None of these funds have been appropriated and the predictions are grim for FY 1990.

Section 205(j) allows one person of a state's Construction Grant allotment (or $100,000, whichever is greater) to be used for water management planning including nonpoint management. An additional one percent (or $100,000)can be used for nonpoint source management. The later amounted to approximately $22.6 million for all states in FY 1988 and approximately $9.5 million in FY 1989. FY 1990 is the last year of this funding which is dependent on the appropriation for Construction Grants. The Administration has requested a two-thirds cut for FY 1990.

Section 603(c) and Section 604(b) State Revolving Loan Funds may be used for nonpoint management. The Administration has also cut this funding source. Furthermore, it is a doubtful source of management funding since it has to be repaid.

Funding is a critical issue. Lack of federal funds has a discouraging effect on state programs.

The nation needs to give greater priority to controlling and reducing nonpoint pollution. Section 319 is a marginal attempt bred from a reluctance to set tough federal targets for cleanup of water pollution that doesn't come from the end of a pipe. Additional improvements in water quality must come from control and reduction of the many scattered sources that are not permitted as point sources.

Since Section 319 lacks the regulatory muscle to require controls, and since the Environmental Protection Agency has weakened, rather than strengthened nonpoint management during implementation, we need to look at a more directed, enforceable program.

The elements of such a program would be:

- o A federal list of performance standards for those activities causing nonpoint pollution.
- o A system of approval and enforcement for those standards.
- o An adequate funding base to assist states with implementation and enforcement.

We should continue to work for whatever improvements as are attainable under the current Section 319 program. EPA should be encouraged to aggressively assist the states in implementing their programs. We should push for full authorized funding levels for the nonpoint program and for construction grants.

At midterm, I am not ready to pronounce Section 319 a failure. But I cannot point to a single body of water that has improved as a result of this particular amendment to the Clean Water Act.

National Association of Conservation Districts

Statement on Implementation of the Water Quality Act of 1987

Before the
Senate Subcommittee on Environmental Protection
Committee on Environment and Public Works

June 16, 1989

Mr. Chairman, members of the committee, my name is Ernest C.Shea and I am the Executive Vice President of the National Association of Conservation Districts. I appreciate the opportunity to testify today on the status of nonpoint source pollution control efforts.

Our Association represents the nearly 3,000 local conservation districts in this country and the 16,000 men and women who serve on their governing boards. Conservation districts are local subdivisions of state government which are charged with designing, coordinating and carrying out comprehensive natural resource management programs at the local level. Along with soil erosion and sediment control, one of the principal resource issues of concern to conservation districts in the past decade has been nonpoint source pollution abatement.

Water quality has been high on the nation's environmental agenda for a number of years, especially since the enactment of the 1972 Clean Water Act. The problem, however, is that we have focused our attention on water quality too narrowly. Substantial progress has been made in addressing point sources of pollution such as industrial and municipal waste discharges, but federal support for nonpoint programs has been seriously deficient. As a result, nonpoint pollution represents the last significant barrier to achieving the original goal of the 1972 Act. EPA's 1986 National Water Quality Inventory (305(b) Report) shows that for waters not supporting their designated uses, nonpoint pollution was the leading cause for impairment in 65% of U.S. rivers and streams, 76% of U.S. lakes, and 45% of U.S. estuaries. Preliminary data from the 1988 National Water Quality Inventory also indicate that the most extensive causes of use impairment in the nation's rivers and lakes are siltation and nutrients. While the 1988 figures are not yet final, EPA reports that "NPS pollution clearly continues to be the major remaining source of impairment in waters not fully supporting their designated uses." (Martha Prothro, Director of EPA's Office of Water Regulations and Standards, quoted from panel discussion at the NACD National Nonpoint Conference, April 24, 1989, St. Louis, Missouri.)

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NACD fully recognizes the need to continue addressing our point source problems, but if we are to achieve our water quality goals we must turn adequate attention to the serious nonpoint problems affecting our waters. If we expect to collect returns, in the form of improved water quality, from our 17-year investment in point-source controls we must make a concommitant investment in nonpoint source pollution control.

Nonpoint source pollution is a complex problem and in many ways it is more elusive and difficult to control than are point sources. There are, however, practical solutions to nonpoint problems. During the past decade especially, management practices have been developed and refined which can effectively control problems resulting from leaking septic and underground storage tanks, agricultural and silvicultural activities, urban runoff, mining and other areas.

The Water Quality Act of 1987 set up a national framework to address nonpoint source pollution problems. The Act, directing states to carry out nonpoint assessments and develop comprehensive management programs and authorizing federal funding to help develop and carry out these programs, appeared to signal a readiness on the part of the federal government to elevate nonpoint to a high national priority. Two-and-a-half years after passage of the Act, however, neither Congress nor the federal government has followed through on this commitment. Thus, while the beginnings of a national framework are in place, and while the technology to remedy many of our nonpoint problems is available, the lack of federal support for nonpoint programs has hindered their implementation.

Many states are now hesitant to move forward too quickly simply because they are apprehensive about the commitment at the federal level. Memories of the 208 program of the late 1970's are still too vivid. Under 208, millions of dollars were spent identifying nonpoint problems and potential solutions. Support promised by the federal government never materialized and many of the 208 plans ended up on a shelf collecting dust. I sincerely hope this does not become the case with 319 plans.

With respect to the Environmental Protection Agency, we are pleased that the Agency has recently begun to expand and accelerate their nonpoint activities. EPA's recently released publication, Nonpoint Sources: Agenda for the Future, is certainly a step in the right direction. In his letter transmitting the report, former Administrator Lee M. Thomas accurately points out that,

> ... much remains to be done before we can achieve the ultimate goal of the Clean Water Act -- fishable and swimmable waters.
>
> One important area of unfinished business is non-point source pollution. This report sets forth EPA's commitment to a national non-point source program during the next five years. (Nonpoint Sources Agenda for the Future - NPS Nonpoint Source Solutions, January 1989.)

The Agenda does in fact set forth an aggressive and comprehensive approach to addressing nonpoint source pollution. We are pleased with the Agency's commitment to utilizing state and local leadership, and developing a

program mix of new, as well as existing program authorities. However, it must be translated into action if we expect a national nonpoint program to be successful.

Frankly, even though their Agenda for the Future has a lot of promise, we feel that nonpoint is still a relatively low priority in EPA. It is clear to us that the Agency could be doing a great deal more to give higher priority to nonpoint programs. An example of where nonpoint programs rank as an Agency priority can be seen by looking at the number of staff assigned to this area. EPA has only about a dozen full time staff equivalents working on nonpoint programs at the national level, and only part of these are professional program staff. At the regional level, there is also little staff support for nonpoint programs. Most EPA Regional Offices have but one nonpoint specialist. One Regional Office has no nonpoint specialist of its own but instead relies on a water quality specialist assigned to the office by the USDA Soil Conservation Service. That's a very minimal commitment to a program area of significant national importance. We feel that EPA has yet to demonstrate a commitment to provide the staff and financial resources needed to support the states and private sector in developing and carrying out comprehensive nonpoint programs. Although states are "in the driver's seat," so to speak, they do need support and guidance from the federal government. If EPA is serious about their Nonpoint Source Agenda, this problem needs immediate attention.

One area in which we have been highly critical of EPA is in the realm of public involvement in the development of their programs. We feel that both the Agenda and the Guidance to States on implementing Section 319 were developed with minimal input from the other agencies, interests and user groups that would be involved in carrying out these efforts. Although EPA created a Nonpoint Source Task Force, it was not utilized as effectively as it could have been. For the most part, the Task Force simply reviewed what EPA had developed internally. There was little opportunity to contribute meaningful and substantive dialogue with regard to critical program components and sensitive policy issues during the development stage. This lack of outside input puts EPA in a precarious and insulated position when trying to determine what will and will not work at the state and local levels in both the public and private sectors. In some instances this void resulted in their actually erecting barriers to program implementation. For example, EPA's determination that ongoing state nonpoint cost-share and other water quality related conservation programs would not qualify as either Maintenance of Effort or eligible match for a Section 319 grant was viewed by many as penalizing the states that were doing the most in the nonpoint arena. Many such controversies could be averted if more outside input were sought while EPA programs are being developed.

A final comment on EPA concerns internal coordination of the Agency's different but related water programs. EPA seems to recognize that many water quality problems and solutions are inter-related. Several of the guidance documents recommend that states, in developing their comprehensive Clean Water Strategies, try to combine resources and programs dealing with nonpoint, toxics in surface waters, ground water and water quality efforts. Yet the Agency itself often seems tied up in internal turf battles between

the various offices responsible for these different programs. The result: Lack of a coordinated effort in the nonpoint arena, wasted resources, and, sometimes, confusion. We would like to see EPA establish intra-Agency coordination as a principle in all of their program efforts.

On a positive note, we feel EPA is becoming more responsive to some of these concerns. The establishment of the Watershed Assessment and Protection Division within EPA is a good sign that the Agency is becoming more attentive to nonpoint issues. We also believe that communications, both within EPA and with outside groups, have improved considerably in the past few months. These are positive steps and we hope to see movement in this direction continue.

Despite the fact that the funding authorized under Section 319 to assist states has yet to be appropriated, nonpoint programs have been moving forward at the state and local level. So far, 36 states have submitted their assessment reports and 23 have submitted the proposed management programs required under Section 319. As stated earlier, had the resources been available we believe the response would have been much better than what we've seen so far.

One area where states are moving ahead briskly is in agricultural nonpoint pollution abatement. Last year alone, some 31 states provided over $100 million in cost-share funds to assist landusers in implementing nonpoint best management practices. While not all of these programs were originally designed to address nonpoint problems, most directly complement ongoing state water quality programs. Several of these state programs have also evolved into regional nonpoint programs such as the Chesapeake Bay Program, the Puget Sound Initiative, the Gulf Initiative and others. A brief summary of these state activities is included as an appendix to this statement.

One of the missing pieces of the puzzle, and part of my reason for being here, is our concern over the lack of aggressive national leadership in the nonpoint arena. While states are making progress, they need further guidance and better mechanisms for information sharing in the nonpoint arena. Because of this lack of federal leadership there is a real danger that state and local programs will show little national consistency. In many cases, our member districts and their companion state soil and water conservation agencies have turned to us for the guidance and coordination needed in addressing nonpoint water quality issues.

In response to these needs, NACD has developed a national information sharing network to expedite the development and implementation of water quality initiatives. For example, in April NACD, EPA, and several other national conservation organizations, sponsored a national conference entitled "Making Nonpoint Programs Work." The conference drew nearly 500 conferees from federal, state and local agencies, as well as the private sector. The overwhelming conclusion drawn from many of the presentations at this conference was that more federal support is needed in carrying out a balanced and comprehensive national nonpoint program.

(The proceedings from this conference, including the texts of major presentations, will be available by mid-summer. NACD would be pleased to provide members of this committee with a copy of the publication.)

In the past two years NACD has also sponsored seven regional nonpoint conferences bringing together state water quality agencies, state soil and water conservation agencies, EPA and others to discuss regional nonpoint problems and solutions. We've also been doing our own analyses of the draft 319 management programs and providing EPA with our results.

One of the most important initiatives that NACD has recently undertaken is in convening an agricultural water quality task force. The purpose of this group is to try and bring together the many diverse groups -- from commodity groups to environmentalists, to federal and state agency representatives -- that are involved in ag nonpoint issues and create a common agenda to address our surface and ground-water program needs. We hope to create a forum whereby all the parties involved in these issues can work together toward the common goal of clean water for this nation.

Lastly, I would also like to point out some areas where Congress could enhance its role in addressing nonpoint issues. While the Water Quality Act of 1987 was a good starting point in developing a national nonpoint water quality program, we strongly feel that Congress needs to make it clear that nonpoint source pollution control is high on our nation's public agenda. Clearly, the lack of adequate federal financial support for nonpoint pollution abatement remains the number one impediment to the implementation of our control strategies and achieving the goals of the Clean Water Act. We strongly encourage the members of this committee to work with the Budget Appropriations Committee to help them understand the need to appropriate the funds authorized under Section 319.

We also feel that Congress needs to re-examine the timeframe for accomplishing the goals of the Water Quality Act. EPA's Nonpoint Sources Agenda for the Future states that "Congress gave the NPS program a four-year lease on life." Two-and-a-half years after its enactment, it may appear that little has been accomplished with respect to Section 319. Nevertheless, we believe that we have come a long way in defining many of the policy issues, program impediments and actions needed to develop a sound nonpoint strategy. We have the momentum and the time is right to put these programs and issues into action.

In the Senate Debate on the nonpoint provisions of Act in October of 1986, Senator Durenberger remarked that "We will not find this program adequate if real improvement in water quality has not occurred. We are not so much interested in the elements of a state program as we are concerned with meeting the goals and objectives of the Clean Water Act."

In fact, we agree with Senator Durenberger's statement, but we also hope that Congress will allow the program the true test of its merits. This can only occur if Congress provides the resources, the guidance and direction and enough time to let the program work.

Thank you.

Summary of State Cost-Share and Other Financial Incentives Programs

Appendix I to the

National Association of Conservation Districts

Statement on Implementation of the Water Quality Act of 1987

Before the
Senate Subcommittee on Environmental Protection
Committee on Environment and Public Works

June 16, 1989

National Association of Conservation Districts
509 Capitol Court, NE, Washington, DC 20002
(202) 547-6223

Summary of Cost-Share and Other Financial Incentives Programs

STATE	TYPE OF PROGRAM	YEAR BEGUN	1988-89 FUNDING
Alabama	Soil Erosion, Ag. Water Quality Forestry	1985	$2,175,000
Arizona	Range Improvement Cost Share	1986	No new funds
Arkansas	Water Resource Conservation Development Incentives	1985	N/A
California	Soil Survey	1988	$ 240,000
Connecticut	Animal Waste Pollution Abatement	1974	$ 43,000
Delaware	General Conservation Practices	1984	$ 315,000
Florida	Agricultural Water Quality	1986	$4,337,000
(2)	Soil and Water Action Projects	1985	$ 269,000
Georgia	State Committee Technician Program	1988	$ 322,396
Idaho	Agricultural Water Quality	1980	$3,250,000
(2)	Resource Conservation and Rangeland Development Loan Program.	1987	$ 300,000

STATE	TYPE OF PROGRAM	YEAR BEGUN	1988-89 FUNDING
Indiana	Structural Measures	1988	$1,000,000
Illinois	Erosion and Sediment Control	1981	$ 85,000 (1988) $ 185,000 (1989)
(2)	County Conservation Practices Program and Watershed Land Treatment Program	1986	$5,000,000 (1988) $3,000,000 (1989)
Iowa	Soil Conservation	1973	$6,789,972
(2)	Wind Erosion Control Incentive Program	1979	$ 150,000
(3)	Conservation Practices Revolving Loan Fund	1983	$ (699,000) (carryover)
(4)	Water Quality Protection Projects	1988	$ 500,000
Kansas	Water Resources Cost-Share Program	1981	$1,446,375
(2)	Water Resources Multipurpose Small Lakes Program	1986	$1,157,482
(3)	Water Resources High Priority Cost-Share Program	1986	$ 514,372
(4)	Water Resources Watershed Dam Construction	1977	$ 778,610
(5)	Water Resources Watershed Planning Assistance Program	1988	$ 0

STATE	TYPE OF PROGRAM	YEAR BEGUN	1988-89 FUNDING
Maryland	Ag Water Pollution Control	1983	$5,000,000
Minnesota	Erosion Control and Water Quality Management	1978	$1,501,000
(2)	Reinvest in Minnesota (RIM)	1987	$4,500,000 900,000 (admin)
(3)	Farmland Protection Property Tax Credit Program	1986	$ 30,000 (tech. asst.)
(4)	Erosion Control: Noncropland	1976	$ 158,700
(5)	Flood Control	1978	$ 198,500 (General Fund) $ 100,000 (Bonding)
Mississippi	Forest Resources	1974	$3,000,000 (FY-89)
(2)	Soil and Water Conservation	1985	$ 100,000
Missouri	Soil Erosion Control	1982	$10,167,000
(2)	Soil and Water Conservation (Loan Interest-Share)	1984	$8,500,000 (loan fund)
(3)	Soil and Water Conservation (SALT: Special Area Land Treatment)	1985	N/R
(4)	Wildlife Habitat Improvement	1987	($860,000 in payments since 1987.)
(5)	Native Prairies Restoration Incentive	1988	$ 500,000

STATE	TYPE OF PROGRAM	YEAR BEGUN	1988-89 FUNDING
Montana	Range Improvement Loan	1979	$ 500,000
(2)	Conservation District Grants	1981	$ 220,000
(3)	Conservation District Grants	1983	$ 95,000
(4)	Conservation District Water Reservation Grant	1983	$ 50,000
(5)	Conservation District Riparian Management Grant	1985	0
(6)	Renewable Resource Development Grants	1975	$ 155,249 (water projects) $ 232,874 (nonwater)
(7)	Water Development Loans and Grants	1981	$ 322,989
(8)	Conservation Districts Agricultural Energy Conservation Grants	1988	$ 260,000
Nevada	Energy Demonstration	1987	$ 127,000
Nebraska	Soil and Water Conservation	1977	$3,506,748
New Jersey	Farmland Preservation, Soil and Water Conservation	1983	$6,000,000
North Carolina	Forestry Development	1977	$1,700,000
(2)	Agricultural Cost-Share Program	1984	$6,840,992
(3)	Tax Credit for Purchase of Conservation Tillage Equipment for Agriculture and Forestry	1984	N/A

STATE	TYPE OF PROGRAM	YEAR BEGUN	1988-89 FUNDING
North Dakota	Wildlife Cost-Share Program	1979	N/R
Ohio	Agricultural Pollution Abatement	1978	$ 150,000 (1989) $ 150,000 (1990)
(2)	Natural Resource Protection	1969	$ 498,000
(3)	Multiflora Rose Control	1986	$ 60,000
Oklahoma	Soil Erosion and NPS Pollution Prevention	1982	$ 0
Oregon	Discretionary Grants	1981	$ 67,518
	District Operation	1981	$ 94,726
	617 Planning	1985	$ 117,876
	GWEB	1987	$ 10,000
	Willamette Erosion	1987	$ 15,000
Pennsylvania	Chesapeake Bay Agriculture Program Financial Assistance	1985	$2,166,830
South Carolina	Forest Renewal	1982	$ 500,000
(2)	Tax Credit: Conservation Tillage and Drip/Trickle Irrigation Equipment	1981	N/A
(3)	Tax Credit: Water Impoundments	1984	N/A
South Dakota	Living Snow Fence Incentive	1987	$ 10,000
(2)	Shelterbelt Incentive Program	1985	$ 40,000
(3)	Conservation Project Grants	1986	$ 300,000

STATE	TYPE OF PROGRAM	YEAR BEGUN	1988-89 FUNDING
Utah	Revolving Loan: Agricultural Resources Development Loan	1983	$ 747,187 (1988) (Total balance in fund = $14,450,000)
Vermont	On-Site Sewage Program	1973	$ 211,000
Virginia	Reforestation of Timberlands	1971	$1,400,000
(2)	Chesapeake Bay Agricultural BMP Program	1984	$1,200,000
(3)	Statewide Ag BMP Program	1987	$ 187,000
(4)	Tax Credit for Purchase of Conservation Tillage Equipment	1985	N/A
Washington	Nonpoint Water Quality Matching Grants	1987	N/R
Wisconsin	Soil and Water Resource Management	1982	$2,304,500
(2)	Farmland Preservation Tax Credit	1977	N/A
(3)	NPS Pollution Abatement	1978	$6,732,400
	Total Reported Funds		$101,011,296

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STATEMENT OF

THE HONORABLE BURTON STALLWOOD

TOWN ADMINISTRATOR, LINCOLN, RHODE ISLAND

on behalf of

THE NATIONAL LEAGUE OF CITIES

on

IMPLEMENTATION OF THE WATER QUALITY ACT OF 1987
CONSTRUCTION GRANTS/STATE REVOLVING FUND

before the

SUBCOMMITTEE ON ENVIRONMENTAL PROTECTION

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

UNITED STATES SENATE

June 16, 1989

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Mr. Chairman, members of the Committee: I am Burt Stallwood, Town Administrator for Lincoln, Rhode Island. I am here today on behalf of the National League of Cities, in which I serve as Chairman of the Energy, Environment and Natural Resources Committee. I am also currently serving on the Office of Technology Assessment's advisory board on an ongoing infrastructure study.

I am testifying today for the National League of Cities and the 16,000 cities and towns across the nation we represent on an issue of major significance not only to the nation's environmental well-being, but to our economic well-being and growth -- the ability of local governments to finance and maintain a vital part of the nation's infrastructure, our sewerage treatment plants.

We now know, beyond any doubt, that the federal government has the resources to provide financial assistance to state and local governments in meeting the federal mandate for secondary treatment. Shortly, we expect the President to sign legislation obligating the nation's taxpayers to spend over $200 billion to bail out the nation's savings and loan industry. That is payment for past fraud, abuse, and failure; not an investment in the future.

We are here today to address what should be a more important priority: federal financial participation in assuring that all

of our citizens live in cities and towns which provide adequate treatment for their wastewater.

Let me add, that we at the local level -- perhaps even more than you -- are very aware of the federal deficit and its impact on decisions made here in the nation's capitol. We, at the local level, perhaps more than any one else, have felt the effects of the federal government's attempts to reduce spending and get the deficit under control. Our recommendations reflect our awareness of the difficult deficit problem with which you in Congress are trying to grapple.

We believe there are five guidelines the federal government should address to ensure that cities and towns are able to deal effectively with this, and other, mandated programs:

1. consistency in honoring legislated commitments;
2. state matching requirements;
3. water pollution control needs beyond wastewater;
4. recognition of the fiscal capacity (or lack thereof) of local governments to comply with unfunded federal mandates; and
5. equitable tax policies.

1. Consistency in honoring legislated commitments:

Capital financing and securing revenue streams to pay off bondholders requires consistency of funding sources. This is especially the case in long-term, sophisticated infrastructure

projects such as wastewater treatment facilities.

Ever-changing federal commitments and appropriations wreak havoc with the stability necessary to ensure the needed financial commitments to infrastructure projects.

In 1987, under the leadership of this committee, Congress approved amendments to the Clean Water Act which, in effect, phase out federal grants for the construction of municipal wastewater treatment plants and create, as an alternative, a state revolving fund. We were assured that funding commitments would be adequate to insure that these new revolving funds would be a more than sufficient substitute for the eliminated grants.

We were promised $2.4 billion annually through 1991, with a gradual phaseout of federal financial participation beginning thereafter, ending in 1994. By that time the seed money provided to the SRF was supposed to have been adequate to assure a continuing supply of funds to meet the nation's wastewater treatment needs.

Funding for the program was cut by slightly over $40 million in fiscal 1988 -- and it would have been substantially more had it not been for Congress' refusal to appropriate funds for an unauthorized program the previous year -- and by $450 million in fiscal 1989. Now, the Administration is seeking to cut the program by 50 percent below authorized levels, or by $1.2 billion, for fiscal 1990.

Even once an appropriation is signed into law, we have no ability to count on it. The House and Senate Appropriations Committees are considering administration proposals to cut current funding levels more than six months after they became law. It becomes impossible to plan, at either the state or local level, if we never know what resources will be available to us.

We note, in contrast, that the president's and the Senate bail-out plan specifically makes the full bail out capital available up front -- not subject to annual budget, authorization, appropriations and Gramm-Rudman considerations over any of the next thirty years. This was regarded as critical to ensuring appropriate planning and pay off of the bonds.

2. State Matching Requirements:

Recognizing the deficit problems facing the federal government, and being willing partners in supporting your efforts to get your fiscal house in order, NLC supported moving to a revolving loan program as an alternative mechanism for providing financial assistance to municipalities that had not yet met the law's requirements for secondary treatment of all wastewater.

The system established in the act, providing 80 percent federal money to be matched by a 20 percent state contribution to a revolving loan fund, seemed reasonable, in light of the federal government's financial plight, to municipalities which now would be required to finance 100 percent of the cost of constructing

these federally mandated facilities.

You can imagine our dismay when no one in Congress raised any objection to EPA's guidance on the SRF allowing the states to use interest paid by local governments on loans from the SRF to meet their matching share requirement. Our perception was that we'd been "had." Not only will municipalities who were not top-priorities for funding with grant money now have to pay 100% of the construction costs, they will have to pay the state's matching share as well.

This provision in the guidance clearly will increase the interest rates local governments, in states that avail themselves of this authority, will have to pay on loans from the SRF and consequently increase costs to local taxpayers -- all of whom have already been taxed to pay for the construction of facilities in other cities that received 75 percent or 55 percent federal grants.

3. **Water pollution control mandates beyond wastewater;**

I can assure members of this committee that the nation's cities and towns are looking at what is yet to come -- programs to control pollution from stormwater runoff -- with fear and trepidation.

At our recent steering committee meeting we discussed the issue of combined sewer overflows. Presenters on the issue indicated that municipalities with combined systems face

potential costs in excess of $100 billion over the next several years to address control of pollution from "storm events." And this does not account for what has already been spent by local governments, with local tax dollars, in addressing the problem. Just one example, San Francisco has spent over $500 million on its CSO and estimates it will require an additional $300 to $400 million to complete the job.

We have also seen proposed separate storm sewer regulations, and, while no cost estimates for implementing whatever program EPA ultimately devises have been developed, we fully expect the program to be of a magnitude at least comparable to the cost of fixing combined systems.

When, by EPA's own estimates, it will require "$67.9 billion to satisfy all categories of need [for wastewater treatment] for the current (1988) population," where are we going to find the resources to meet subsidiary water pollution control financing needs?

Which leads me to my final two points:

4. Mandates:

So long as federal mandates were accompanied by at least partial federal resources to comply with them, there was an incentive to accept federal priorities at the local level.

These incentives have long since vanished, but the mandates seem to increase in number, complexity and costliness.

Just as the federal government has recognized that, given the deficit, it can no longer function as it did in the past, so too must the federal government recognize that it cannot issue unfunded mandates in the same way it issued those for which it was willing to pay.

In meetings earlier this year between the NLC leadership and the bipartisan leadership of the House and Senate, it was suggested to us that our requests for continuation, expansion or creation of federal programs had to be accompanied by proposed revenue sources to fund these programs.

We would like to suggest that as you impose new mandates on other levels of government, you engage in a similar exercise. First, the federal government must develop a realistic program to determine the true cost of new mandates. Second, tell us which of our resources we are supposed to use to pay for these programs.

And, the federal government must also be honest in these determinations: you cannot tell us to do what you are unwilling to do -- "raise taxes."

5. Equitable tax policies:

Given that a number of members of this committee are also on the Finance Committee, I'd like to raise several concerns we have about tax "reform."

Capital investments at the state and local level have been

and are funded largely through the use of municipal bonds.

Over the past eight years, however, the tax code has been revised no less than six times. And every time the tax code is "reformed," the ability of state and local governments to meet the infrastructure needs of our nation has been further curtailed.

In 1984, the federal government effectively ended the concept of public-private partnerships. In 1986, the federal government effectively eliminated tax-exempt bonds. It left slightly taxable, more taxable, and fully taxable bonds.

Each and every encroachment has simply increased the cost of building, maintaining, and rebuilding public capital facilities. The so-called reforms have not only limited state and municipal authority to issue capital financing, but have severely eroded the potential market for selling our bonds.

We now have volume caps; limits on the extent to which public facilities can be financed with tax exempt financing if "private purposes" are beneficiaries in excess of specified percentages; and, odd definitions of "private purposes." Syracuse, Utah, for instance, is prohibited from using tax exempt financing for expanding its municipal wastewater treatment plant because 17 percent of the treatment plant's capacity is for a "private purpose" -- a United States Air Force Base!

One of the most severe impacts to major infrastructure

projects is created by the growing practice of individual members of Congress proposing effective or retroactive effective dates in bills restricting municipal authority to use tax-exempt capital financing.

The use of effective and retroactive dates for tax exempt municipal bonds in proposed legislation imposes a cloud over the ability of a city, town, or state to issue a bond; for bond counsel must opine that the bond could become fully taxable to the holder, thereby reducing any incentive for its purchase.

This practice is particularly unfair because it enables a single member of Congress to disrupt public financings in all parts of the nation without any report to Congress, any hearing, any views of the administration, much less any confirmation by a majority of Congress.

We appreciate the opportunity to testify on financing our nation's clean water objectives.

ASSOCIATION OF STATE AND INTERSTATE WATER POLLUTION CONTROL ADMINISTRATORS
HALL OF THE STATES • 444 NORTH CAPITOL STREET, NW • SUITE 330 • WASHINGTON, DC 20001-1512 • (202) 624-7782

TESTIMONY OF THE

ASSOCIATION OF STATE AND INTERSTATE
WATER POLLUTION CONTROL ADMINISTRATORS

BEFORE

THE UNITED STATES SENATE SUBCOMMITTEE ON ENVIRONMENT

SUBJECT: IMPLEMENTATION OF THE 1987 WATER QUALITY ACT

June 1989

ASSOCIATION OF STATE AND INTERSTATE WATER POLLUTION CONTROL ADMINISTRATORS

Testimony before the Senate Subcommittee on Environment Protection

June 1989

Mr. Chairman, Members of the Subcommittee:

My name is Roberta (Robbi) Savage, Executive Director and Secretary Treasurer of the Association of State and Interstate Water Pollution Control Administrators (ASIWPCA). ASIWPCA is the national non-partisan organization of State water professionals responsible for the implementation of this nation's water quality programs. The Association commends the Subcommittee for its strong support of State Clean Water Programs. The States are pleased to have this opportunity to share our views on the implementation of the Clean Water Act since its passage in early 1987.

The Subcommittee has asked that I limit my verbal presentation to the issues related to the implementation of the State Revolving Loan Fund. I would ask, however, that my complete written statement, which also deals with the Toxic Pollutant Control Program under Section 304(l), and the Nonpoint Sources Control Program under Section 319, be considered by the Subcommittee. The States believe the 1987 Amendments are fundamentally sound. The States are also convinced that mid-course corrections are appropriate. ASIWPCA submits that:

* Legislative refinements are essential in the Revolving Loan Program for States to maintain viable programs, and

* Administrative refinements in the USEPA's toxics and nonpoint source programs are necessary to accomplish the goals of the Act.

STATE REVOLVING LOAN FUND

The States were among the primary advocates of the State Revolving Loan Fund (SRF) in development of the 1987 Water Quality Act. We strongly support the concept and believe that adequately capitalized revolving loans will be the most viable mechanism for funding not only municipal wastewater treatment but also other pollution control activities such as nonpoint sources.

The Covenant and Its Guiding Principles -- State and local governments reached a covenant with Congress and the Administration in the 1987 Water Quality Act. Over $83 Billion in wastewater construction needs were transferred to State and Local governments in exchange for $18 Billion in seed funding. ***All parties agreed to build a workable program, wholly State managed, with minimal Federal requirements.*** Unfortunately, the program has fallen far short of achieving those goals. The members of Congress, in putting forth the State Revolving Loan Fund, agreed that:

* **The full authorization funding level was necessary** to build a viable program.

* **The SRF is very different from the existing grant program,** because it was ultimately to be the jurisdiction of the States and because of complicating factors related to tax law, fiscal management, and marketing.

* **The SRF must be competitive with other municipal financing mechanisms,** both in terms of cost and complexity.

* **No two SRFs will be the same.** Each State is unique and needs flexibility to tailor its program to the political, economic, and bureaucratic situation.

MAJOR RECOMMENDATIONS

Based on these principles and State program experience, the Association submits that legislative and administrative refinements are urgently needed.

1. FULL FUNDING -- **Full funding is needed to accomplish the goals of the 1987 Water Quality Act. States urge the Committee's strong support of the Clean Water Act in the budget and appropriation process.**

   At the levels now being contemplated (40% of authorized levels), the SRF will be a greatly diminished national program that cannot achieve what was contemplated in the 1987 law.

2. SIMPLIFICATION -- **To operate effectively, SRF requirements must be as simple and straight forward as possible. Restrictions in the law and USEPA requirements are undermining SRF viability by:**

   a) increasing project costs up to 20-30%,
   b) decreasing SRF attractiveness to local governments, and
   c) greatly complicating administration.

Cumulatively, the environmental, social commitments, tax law, and financial management restrictions require expenditure of a tremendous amount of effort. This is difficult to justify, particularly since the Federal program will cover only a small portion of the needs. While States can offset the impacts by lowering interest rates and leveraging to expand the size of the fund, it must be recognized that this requires a significant and sometimes prohibitive resource investment which can also erode the fund's corpus.

USEPA Requirements:

As currently structured, **the SRF is more of a Federal than a State program** for the reasons outlined below. The Association urges that the balance intended by Congress be restored. At a minimum, the application of all Federal laws should cease after the first round of loans. In addition, the Agency should:

* **Eliminate application of Title II grant requirements once the enforceable requirements of the statute are met** -- they are unnecessary, expensive, and onerous with inadequate flexibility for State interpretation.

* **Recognize that the SRF is a State program, and eliminate the determination of the Inspector General audits in perpetuity.**

* **Eliminate the letter of credit** -- it is restricting State ability to develop programs because it limits Fund uses, increases costs, delays project funding, and reduces program effectiveness. The policy is becoming even more restrictive under the USEPA regulations proposed.

* **Adhere to the directives in statute and accept that the nation's governors (not USEPA) are to determine compliance with the requirements of the law** as specified in Section 604(b)(5) and (6).

Crosscutting Laws -- **Other Federal laws should not apply to projects receiving SRF loans** -- There are over 23 such laws at the present time which USEPA is applying ***in perpetuity*** and the number is likely to increase (e.g. Historical Preservation Act, Drugs Free Work Place). This increases project costs and uncertainty, discourages local participation, and impedes water pollution control progress.

20% Cap -- **The Governor's Discretionary Fund percentage cap in Section 201(g)(1) should not apply to the SRF** -- It precludes **full use** of the SRF in many States to address water quality problems that can be remedied by *"non-core" projects* such as those for nonpoint sources, rehabilitation, combined sewer overflow correction, or collector sewers.

Tax Law -- **Current State and Local reporting requirements should be simplified** -- The 1986 Tax Law has a profound impact on State and local government due to prescriptive recording keeping requirements *for loans and repayments* related to arbitrage, rebate, private purpose use, and tax exempt bonding.

3. ADMINISTRATIVE COSTS -- **Administrative costs in Section 603(d)(7) should be based on 4% of the authorized level** -- with a $400,000 minimum per State. In addition, States should be able to use non-Title VI funds for SRF administration as necessary.

   4% of the appropriated grant amount is not sufficient to administer this complex program and, according to USEPA, after 1994, the law allows use of no SRF funds for such purposes (i.e. 4% of zero is zero).

4. LAND ELIGIBILITY -- **Land, easements and rights of way should be eligible for funding under Section 603(c).**

   They are integral to a facility and can be substantial in cost. Unless the SRF can provide communities with "one stop shopping", project costs will increase and the SRF will be a less attractive financing mechanism.

5. SMALL COMMUNITIES -- **Some small, financially hard-pressed communities will be unable to payback loans.**

   This issue should be examined in more detail. Even if States are able to highly subsidize interest rates, these communities will have trouble complying with pollution abatement laws.

   IT IS IMPORTANT FOR THE CONGRESS AND THE USEPA TO REALIZE UNDER THESE CIRCUMSTANCES, THAT:

   * **States are turning much more of their attention to building their financing programs.** The Federal SRF may be small in comparison.

   * **Some States may not establish SRFs.** This is due, in large measure, to the decline in Federal funding, the 20% State match, eligibility restrictions, and onerous USEPA and other financial requirements.

STATE PROGRAM STATUS

Significant progress has been made since February 1987 in establishing SRFs:

TOTAL NUMBER OF STATES ACHIEVING MILESTONES
(1989 and 1990 Projected)

	State Law/Regulations		State Capitalization	Loan Commitments
	Enacted	Adopted	Grant filed with USEPA	Being Made
10/1/88	39	20	13	7
10/1/89	48	45	46	37
10/1/90	48	47	47	45

24 States have USEPA approved capitalization grants and 40 are projected by October 1989:

* By March 1989, States issued **$442 Million** project loans. By September 1989, **$1.6 Billion** will be committed.

* **$836 Million** in advance commitments of the 20% State match have been made. **[The Federal share at this level would be $4.15 Billion]**

Full SRF funding is clearly needed with a total in the next 5 years of:

Projects	Dollars
7,588	$45 Billion

* 395 projects totalling over $5 Billion, required to meet the July 1, 1988 National Municipal policy requirements, have yet to be funded,

* 7,193 additional wastewater projects totaling over $40 Billion have been identified as potential loan recipients over the next 5 years.

Project Needs:

40% are needed to maintain future compliance, e.g. facility replacement or expansion,
6% address water quality and/or public health problems,
33% are small communities (generally less than 3500 population), and
13% are necessary to comply with the National Municipal Policy.

[A project can, of course, have more than a single need or justification.]

Impediments to Program Start-Up -- Program implementation has not been as expeditious as States had anticipated because:

1. Under-capitalization of the fund has raised questions with regard to Federal commitment and the viability of the concept.

2. The program is managerially and fiscally complex.

3. In order to meet the Congressional deadlines, States had to initiate the SRF in advance of USEPA policy. This, of course, has made it virtually impossible for States to anticipate and comply with USEPA directives, causing substantial guess work and associated delay.

4. The 1986 Tax Act, in combination with Federal and State financial laws, raised many legal and procedural issues at the Federal and State level, many of which have yet to be resolved.

5. State financing has had to be secured through State legislatures and General Assemblies as well as the bond market, which is a protracted process in many instances.

6. Local communities wanted to be thoroughly briefed on the SRF in advance of participation.

ELIMINATION OF TOXICITY

SECTION 304(l)

The Association supports strong programs to address toxic impacts from all sources as a major element of water pollution control. Since the 1981 Amendments, States have become increasingly concerned about the need to eliminate toxicity. We concluded early on that the traditional approach to the development and use of water quality standards, effluent guidelines, and permit programs would be inadequate to assure successful implementation of a strong toxics control program.

Therefore, the States and ASIWPCA have been at the forefront of efforts to advance the state-of-the-art and eliminate toxicity. For example, in 1983 ASIWPCA developed its toxicity Elimination and Management Strategy (TEAMS). This strategy was the precursor to the joint State/USEPA Toxics Policy. To assure "post-BAT" controls, significant resources have been expended by States for permitting and monitoring to support these initiatives.

Section 304(l) addresses important national concerns and has been a valuable exercise in providing a snapshot of the current status of some toxic pollution problems. ***However, 304(l) is but one aspect of a much broader and more ambitious State and Federal effort to control toxics of all descriptions from a myriad of sources.***

RECOMMENDATION

Section 304(l) should not take precedence over other efforts to control toxicity. Congress should direct USEPA to begin integrating 304(l) into the overall base planning, monitoring, permitting, and enforcement program under the National Toxics Policy.

USEPA should proceed with efforts to assist the 40 delegated States with their toxic pollution control programs

Any follow-up to the lists and other 304(l) requirements should be in the context of and consistent with, ongoing programs to address priority problems.

Specifically, the Association has 3 major concerns regarding implementation of Section 304(l):

1. **304(L) IN PERSPECTIVE** -- Section 304(l) was a "one time" initiative. A relatively small number of waters were included on the "short list" under Section 304(l)(1)(B). Any assumption that 307(a) priority pollutants were the primary cause of stream use impairment has been proven invalid based on the 304(l) listings as well as previous documentation developed by the States and the Association (e.g. the March 1983 ASIWPCA position on toxics (TEAMS) and subsequent information from national technical exchange symposia).

Any premise that NPDES permitting authorities (in most cases States) identified, but failed to regulate significant point source toxic discharges impacting designated stream uses -- primarily due Section 307(a) pollutants -- is also invalid. In many cases the required individual control strategy limits were already in place or under development prior to listing pursuant to ongoing toxics control programs.

2. PROCESS DIFFICULTY -- The implementation process was extremely complex and troublesome for the States. USEPA regulations were promulgated June 2, 1989 -- with the final submission deadlines for the States being February 4, 1989. This delay in providing program direction meant that State submissions were developed without clear, uniform standards nationwide. As a result, the listing process for waters impacted by toxics and the associated individual control strategies created unnecessary controversy between USEPA, the States, Local governments, and constituency groups. ***The situation should improve with an integrated approach in the future.***

3. DELAY AND DISRUPTION -- Overemphasis on the Section 304(l) process has, in many instances, delayed implementation of the programs already in place -- especially those that have been designed to integrate toxic controls into permitting, monitoring, and nonpoint source management as mandated by the Clean Water Act. Critical resources had to be diverted to Section 304(l) ***at the expense of the ongoing toxics program***. The short deadlines and the lack of funding support, significantly disrupted ongoing programs with little to no associated improvement in the control of toxics substances (e.g. point source discharges of non-307(a) pollutants and nonpoint source pollution from agriculture and urban runoff). In most cases, the impacts of toxics on water bodies were known, and the sources involved were available in a more usable form (e.g. 305(b) reports).

WATER QUALITY STANDARDS -- AND THE NEED FOR FLEXIBILITY

The development of appropriate, attainable, water quality standards is integral to the success of the overall Clean Water program. These standards, by their very nature are to be tailored to meet each State's water situation. In addition, the view of the public through public participation in the development process, ensures unique and acceptable standards.

RECOMMENDATION

The Association believes that Section 303(c) in the 1987 Amendments wisely provided alternative approaches for State use in developing and applying standards which efficiently and effectively achieve toxics controls and maintain State primacy. Significant progress has been and will continue to be made to address toxics in the water quality standards program. The States want the flexibility to develop numerical and/or narrative standards based on the problems and stream segments involved.

The Law -- Under the law and USEPA policy, States could adopt:

* numeric water quality standards for all priority pollutants that may reasonably be expected to impact uses in waters of the State, and/or

* comprehensive narrative standards to protect uses and goals of the Clean Water Act along with enforceable procedures for translating such narrative standards into specific numeric effluent limits in NPDES permits.

Benefits -- These options for toxics (numeric and narrative with translating mechanisms) are desirable to achieve the ultimate environmental goals and requirements of the Clean Water Act. The flexibility is critical because each of the approaches has advantages and disadvantages. Depending upon the circumstances, their efficiency and effectiveness in controlling pollution can vary widely (e.g. protection of public health or the ecosystem). States have chosen one or the other (or a combination) based on previous operating experience, available resources/data, the specific parameter or water use of concern, and other factors unique to each State. There are examples of **both approaches** working well in States with experienced comprehensive toxics programs.

While USEPA guidance supports these alternatives for toxics standards setting, there is an emerging tendency toward only the numeric approach. Adoption of specific numeric criteria can be a lengthy process which is not always technically possible or legally defensible. If such a restrictive philosophy were adopted, States are convinced that in many instances a tremendous amount of time and resources will be wasted in the process of adopting and monitoring numeric limits with no attendant benefits in terms of toxic substance control.

STORMWATER AND SLUDGE - THE NEED FOR BALANCED APPROACH

States are concerned that the permitting and control programs being proposed by USEPA for stormwater discharges and sludge management overwhelm and undermine a balanced program. Both the stormwater and sludge requirements proposed will be far more costly than any realistic increase in program resources at the State (or any other) level which could be expected. Unless significant additional Federal resources are forthcoming for their administration, major cuts in other programs -- ***including toxics controls*** -- will be necessary. If such additional resources were to become available, they may be better invested elsewhere (e.g. nonpoint source control).

RECOMMENDATION

While there are important concepts which should be retained in the USEPA proposed regulations for stormwater and sludge technical criteria, the States and ASIWPCA submit that diversion of resources to these massive new programs cannot be justified in light of their limited potential to improve control of toxics and other water quality problems.

As previously discussed, toxics are best addressed in an integrated program. Independent initiatives should not overwhelm or undermine a balanced approach to resolving priority toxics problems.

If concern for toxic impacts from stormwater or sludge management practices is the primary justification, a far more targeted and less resource intensive alternative should be developed. The concept of regulating everything in the hope of controlling the small percentage contributing to problem, is not practical or realistic in these times of limited pollution control resources at all levels of government and the diminishing Federal funding contribution to State programs.

USEPA should substantially restructure the proposed rules to approach the problem with a **systematic identification** of sources contributing to toxic and other water quality problems and a **limited permit program** to specifically address the problems. The rules should make optimum use of existing data and State programs to minimize the need to divert resources from other ongoing priority programs mandated by the Clean Water Act. ***Above all, the program should not overwhelm State and Local governments, thereby further delaying controls at great costs to program credibility.***

NONPOINT SOURCE CONTROL

Section 319 of the 1987 Water Quality Act places a national priority on the assessment and control of nonpoint sources. From the State perspective the provisions of the Act are fundamentally sound. ***The primary Congressional goal was to promote more nonpoint source control in the States.*** Regrettably, the Section 319 program as administered by USEPA has fallen short of that goal as outlined below:

In anticipation of the 1987 Amendments, the States developed **America's Clean Water, The States' Nonpoint Source Assessment (1985)** and took the initiative to organize existing data on nonpoint sources, build institutional relationships, and increase the national understanding of pollution problems, existing activities, and future needs. ASIWPCA found that:

* A host of nonpoint source activities to control pollution were well underway nationwide, and sufficient information existed to implement programs,
* Adequate Federal funding support was critical,
* Nonpoint sources are the priority problem in some States, while point sources are in others,
* Success for nonpoint source pollution control is heavily dependent on increasing the priority of water quality goals at all levels of government,
* Solutions must be developed on a watershed basis,
* The public must become more aware of their important role in pollution control, and
* The primary program challenges include:

  .. coordination of existing programs,
  .. cooperation of relevant institutions and organizations, and
  .. prevention of nonpoint source pollution.

Complex and interrelated technical, political, economic, and administrative issues must be resolved to achieve effectiveness. This poses challenges for all levels of government. By clearly defining administrative roles and working cooperatively, we will take giant steps forward toward controlling the nation's nonpoint source problems.

Today as in 1985, these ASIWPCA observations remain sound. We are pleased to report that nonpoint source control is becoming a significant component of State water quality programs throughout the nation and ASIWPCA continues to promote creative and effective nonpoint source programs. Section 205(j)(5) funding and enactment of Section 319 has been an important impetus to these efforts.

SECTION 319

1. **FUNDING -- Section 319 should be fully funded.**

   At the Federal level the program is long on demands, expectations, and requirements and short on funding. States are profoundly disappointed by the failure of Congress to fund Section 319. Funds, perhaps minor in comparison to the overall need, are critical to an effective State/Federal partnership. Initial funding would send a clear message that a strong and credible national program is essential and that State efforts will be supported at the Federal level. There is no question that the lack of funding is hindering progress on nonpoint sources.

   State nonpoint source pollution control efforts have, over the last several years, been supported in large part by Section 205(j) funds. However, USEPA's decision to limit the amount of 205(j)(5) funds which can be used for planning (as opposed to implementation) hinders 319 assessment and plan development. When Title II is eliminated in 1991 as outlined in 1987 Water Quality Act, nonpoint source activities in many States will, in all probability, be drastically curtailed.

2. **Section 319 Process -- USEPA, in overseeing State activities, should emphasize achieving incremental progress in nonpoint source control.**

   While States agree that quality assessments and management plans are critical, they should not become an end in themselves but should be used as a State road map for the years ahead.

   We are disappointed with the results of the Section 319 process, particularly since the States made such an effort to get a head start and focus on environmental cleanup and abatement actions. Many State Section 319 assessments and plans, based on general USEPA guidance, have been submitted and are awaiting approval action. States have raised concerns, for example, that the Agency has focussed more on volume rather than results. They have also noted that while USEPA focused on these reports, other essential USEPA pollution control responsibilities outlined below went undone.

   Based on this experience, States are very concerned that Section 319 requirements may become so onerous and bureaucratic as to discourage participation by States.

FUTURE STATE CHALLENGES

While progress is being made on many fronts, the Association recognizes that improvements are needed in the States.

1. **Funding** -- States are experiencing a **precipitous decline in Federal funding** to the State water quality program. They estimate from 1988-1992 over $103 Million will be required to manage the State nonpoint source program under the 1987 Amendments. This is in addition to specific project funding. States are vitally concerned about the implications of the Federal funding trend on their ability to achieve the national goals and objectives.

2. **Monitoring** -- State and Local governments need to **expand their monitoring programs** in order to enhance program expertise in the field of nonpoint sources. By its very nature, nonpoint pollution poses complex monitoring problems. Correlating observed water quality degradation to sources involves linking together pieces of a puzzle with transport systems, diverse contaminants and spatial and temporal proximity.

3. **Watershed Management** -- **Watershed management, while necessary, is much more difficult and time consuming to achieve.** Hence, most States will be forced into a position of having to place immediate priority on establishing the nonpoint source program statewide and focus longer term attention on watershed management.

   Monitoring may indicate significant waterbody degradation without yielding specifics on either contaminants, abatement, or cleanup. Most technology has been geared to point sources where controls can be readily directed at quantifiable levels of identified pollutants. For nonpoint sources, pollutants require much more analysis and the diffuse sources are very difficult to identify (i.e., what is linked together in monitoring, must be broken into component parts for application of treatment and management techniques).

   Addressing one layer of pollutants may, like an onion, reveal more complex problems. As California has learned, for example, rice herbicides can be successfully controlled, only to reveal previously existing toxic ambient levels.

4. **Institution Building** -- **Institutional issues continue to be important** and in some instances, inadequately addressed. Numerous agencies impacting nonpoint sources need to become more involved in a cooperative effort. Often the issues are controversial or unfamiliar, requiring innovative approaches.

   As complex as technical questions may be, ultimately, the success or failure of programs may rest on solutions to economic and consequent political issues. By and large solutions will come from Local agencies working with Local interests to manage Local pollution sources -- with State oversight and assistance. Many examples of complexities involve land use planning as a viable methodology. In South Dakota, a developer stripped highly erodible land along Rapid Creek and -- confronted with enforcement alternatives - agreed to revegetate. In Texas, a Best Management Practice (BMP) program was implemented to protect wellheads in the Del Rio area. Protection of the "Emerald Jewel" of the Sierras, Lake Tahoe on the California and Nevada border, relies on cooperative basin planning.

5. **Public Education** -- **Expanded programs for public education and citizen involvement** in nonpoint source control are essential to effective management.

USEPA ROLE

Utilizing its limited resources to enhance this program is essential. **In addition, it is important for USEPA to focus more on the following areas.** USEPA drafted a nonpoint source strategy, and a joint effort with the States is essential to the list of priority implementation actions of most benefit in the States.

1. **Federal Consistency -- There has yet to be a meaningful policy on Federal compliance with Section 319.** USEPA needs to take a lead role in assuring Federal Agency coordination and cooperation to meet the goals of the Act.

2. **Water Quality Lead -- USEPA must have the lead on protecting water quality in the Federal structure.** With the U.S. Department of Agriculture's increasing attention on water quality in a $70 Million program and the Office of Management and Budget's stated desire to transfer **all** the nonpoint source program primarily to that Department -- USEPA may need some Congressional reinforcement in this area. Without State water quality agencies and the USEPA to lead the way, it will be virtually impossible to achieve significant water quality benefits with USDA funds. Any conflict or confusion between government agencies will undermine the intent of the Section 319 program.

3. **Technical Activities -- USEPA should focus on the national technical needs of the nonpoint source program.** ***The management of activities and development of solutions are and should be a State and local government responsibility.*** USEPA should **not** use its scarce resources to second guess decisions.

   * USEPA should provide the necessary **nonpoint source research and development** -- no other issue except funding is more important. Reducing contaminants entering waterbodies is far more effective than trying to treat those waters to remove contaminants,

   * USEPA should concentrate on **standards and monitoring protocols**, e.g. for sediment (uncontaminated and contaminated by nonpoint sources) because current water quality standards and monitoring do not adequately address basic nonpoint source issues,

   * USEPA should **update and revamp STORET** to address nonpoint source concerns and address other components needed for a **quality data management system**, and

   * USEPA should **expand and refine BMPs**, especially for urban areas. There are no pat answers to many technical problems and many States feel USEPA should devote more energy to remedying this situation. In some cases, BMPs may be implemented, for example, but significant problems remain. Local successes should be shared with USEPA working as a clearinghouse, facilitator, and technology promoter.

LOOKING TO THE FUTURE

The thread which weaves its way through all our environmental programs, is public support. The importance of our precious water resources can not be underestimated. In order to focus national attention on this nation's efforts to protect and enhance our waterways, ASIWPCA, under the auspices of its America's Clean Water Foundation, has initiated **America's Clean Water: The Commemoration of the 20th Anniversary of the Clean Water Act.**

The project, commencing in 1989 and culminating in 1992, has 5 major components:

* Citizen Involvement and Awareness: Enhance citizen involvement in clean up efforts and promote personal stewardship of the water resources of the nation,

* Youth Education: Expand educational opportunities for America's youth by developing water protection programs, creating study documents and text, and initiating video and computer learning opportunities,

* Innovation and Technology Exchange: Increase technical exchange among national and international policy makers and environmental professionals,

* Status and Trends Report: Document water quality status between 1972-1992 and set forth the results in a report to Congress and the American public, and

* National Celebration: Commemorate the Twentieth Anniversary of the Clean Water Act with a series of water related festivities to be held in the nation's capital and the fifty State capitals.

A Steering Committee of more than 60 national organizations has come together for the purpose of creating and implementing programs to meet the goals outlined above.

A Congressional resolution designating 1992 as The Year of Clean Water and October of 1992 as Clean Water Month, is being sponsored by the majority of the members of this Subcommittee. We extend to you our appreciation for your support, and hope you will each work with us to ensure success of the Clean Water Act's goals.

Mr. Chairman, I thank you for inviting us to share the views of the States, and I welcome your questions.

STATEMENT BY JACK FICKESSEN
ACTING CHAIRMAN
COUNCIL OF INFRASTRUCTURE FINANCE AUTHORITIES
BEFORE THE SUBCOMMITTEE ON
ENVIRONMENTAL POLLUTION
UNITED STATES SENATE

WASHINGTON, D.C.
JUNE 16, 1989

MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE, MY NAME IS JACK FICKESSEN, AND I AM ACTING CHAIRMAN OF THE COUNCIL OF INFRASTRUCTURE FINANCE AUTHORITIES. THE COUNCIL IS A NONPROFIT ORGANIZATION OF PUBLIC FINANCING AUTHORITIES, WITH AFFILIATE MEMBERSHIP, AIMED AT IMPROVING AWARENESS AND UNDERSTANDING OF INFRASTRUCTURE FINANCING ISSUES AND DEVELOPMENTS AFFECTING THE STATES AND TO FOSTER THE EXCHANGE OF INFORMATION AMONG THE STATES. ON BEHALF OF THE COUNCIL, I WOULD LIKE TO EXPRESS OUR APPRECIATION FOR THE OPPORTUNITY TO APPEAR BEFORE THIS SUBCOMMITTEE TO ADDRESS ISSUES REGARDING THE STATE WATER POLLUTION CONTROL REVOLVING FUND.

THE CLEAN WATER ACT OF 1987 (ACT) AUTHORIZED THE CREATION OF THE STATE WATER POLLUTION CONTROL REVOLVING FUND (SRF) TO REPLACE THE CONSTRUCTION GRANTS PROGRAM AND TO END THE FEDERAL INVOLVEMENT IN FINANCING PUBLICLY OWNED WASTEWATER TREATMENT WORKS. THIS AMENDMENT TO THE CLEAN WATER ACT IS CONSIDERED TO BE A VERY GOOD AND EFFECTIVE SOLUTION TO END THE FEDERAL INVOLVEMENT IN PROVIDING FINANCIAL ASSISTANCE TO PUBLICLY OWNED TREATMENT FACILITIES IN COMPLYING WITH THE REQUIREMENTS OF THE ACT. THE SRF, GIVEN THE OPPORTUNITY, WILL IN OUR OPINION, PROVIDE THE DESIRED AND EXPECTED ALTERNATIVE TO THE GRANTS PROGRAM.

THE SRF HAS THE POTENTIAL OF BECOMING A MAJOR FINANCIAL ASSISTANCE PROGRAM TO PROVIDE A CONTINUING AND GROWING SOURCE OF LOW COST FUNDING FOR NEEDED WASTEWATER PROJECTS THROUGHOUT THE

NATION. THE REVOLVING ASPECT OF THE PROGRAM REPRESENTS A SIGNIFICANT IMPROVEMENT OVER THE CONSTRUCTION GRANTS PROGRAM WHICH PROVIDED ONE TIME ASSISTANCE AND DID NOT ADDRESS LONG TERM NEEDS. HOWEVER, AS WITH ANY NEW PROGRAM, THERE ARE SOME GENERAL AND SPECIFIC AREAS OF THE ACT THAT NEED FURTHER MODIFICATION TO TRULY CONVERT FROM A "GRANT" TO A "LOAN" PROGRAM AND FROM FEDERAL TO STATE CONTROL.

ONE OF THE MOST IMPORTANT ELEMENTS IN ENDING THE FEDERAL INVOLVEMENT IN FINANCING WASTEWATER FACILITIES IS TO ENSURE THE SRF PROGRAM WILL BE SUCCESSFUL. TO DO THIS WILL REQUIRE PROVIDING THE STATES WITH THE FINANCIAL RESOURCES TO ESTABLISH SRF PROGRAMS AT THE LEVEL INITIALLY AUTHORIZED IN THE ACT. THIS IS THE FUNDING LEVEL STATES HAVE USED TO PLAN AND BEGIN DEVELOPMENT OF THEIR INDIVIDUAL SRF PROGRAMS. APPROPRIATIONS AT THE AUTHORIZED LEVEL WILL PROVIDE THE NECESSARY SEED MONEY TO ATTAIN THE LEVEL OF REVOLVING FUNDS REQUIRED FOR SATISFYING EXISTING NEEDS AND GROWTH FOR FUTURE NEEDS AND WITHOUT IT WILL SERIOUSLY JEOPARDIZE THE COMPLETE SUCCESS OF THE PROGRAM.

ANOTHER IMPORTANT FACTOR IN MAKING THE SRF A SUCCESSFUL PROGRAM IS THE ELIMINATION OF GRANT REQUIREMENTS IN TITLE II OF THE ACT FROM THE SRF PROGRAM. THESE RIGID REQUIREMENTS WERE DIFFICULT, COSTLY, AND TIME CONSUMING IN THE GRANTS PROGRAM AND ARE NOT NECESSARY AND SHOULD NOT BE APPLICABLE TO A STATE LOAN PROGRAM WHERE ALL FUNDS ARE REPAID. TITLE II REQUIREMENTS RESULT IN A

LENGTHY PLANNING PERIOD PRIOR TO SUBMITTING AN APPLICATION, DELAYING THE TRANSFER OF FUNDS TO APPLICANTS, WHICH IN TURN AFFECTS THE RATE OF REPAYMENT TO THE FUND.

THE USE OF A LETTER OF CREDIT TO MAKE PAYMENTS TO THE FUND IS ANOTHER PROGRAM IMPEDIMENT. UNDER LETTER OF CREDIT OPERATIONS, PAYMENTS ARE NOT MADE TO STATES UNTIL COSTS HAVE BEEN INCURRED, WHICH IN ADDITION TO DELAYING CAPITALIZATION, INCREASES ADMINISTRATIVE COSTS AND MINIMIZES OPTIONS SUCH AS EARNING INTEREST WHICH WOULD INCREASE THE SIZE OF THE FUND, OR LEVERAGING THE FUND AS NEEDED TO MEET PRIORITY NEEDS.

THE FUNDAMENTAL GOALS OF TITLE VI AND THE CLEAN WATER ACT WOULD NOT BE ADVERSELY AFFECTED BY DELETING THE TITLE II REQUIREMENTS; AND THE REDUCED COSTS AND TIME RESTRAINTS WOULD MAKE THE PROGRAM MORE ATTRACTIVE TO APPLICANTS. THE LETTER OF CREDIT PROBLEM COULD BE IMPROVED BY ALLOWING STATES TO MAKE CASH DRAWS AS SOON AS LOAN COMMITMENTS ARE MADE.

HOWEVER, EVEN WITH FULL APPROPRIATIONS AND REMOVAL OF TITLE II REQUIREMENTS, CERTAIN SMALL COMMUNITIES WILL HAVE DIFFICULTY IN TAKING ADVANTAGE OF THIS PROGRAM. DUE TO SEVERE AFFORDABILITY PROBLEMS, THESE COMMUNITIES COULD NOT PROVIDE THE REQUIRED LOCAL MATCH FOR AN EPA GRANT UNDER THE CONSTRUCTION GRANTS PROGRAM, AND WILL NOT BE ABLE TO REPAY A LOAN, EVEN WITH A ZERO INTEREST RATE. CONSIDERATION NEEDS TO BE GIVEN TO PROVIDING A MECHANISM FOR

MAKING FINANCIAL ASSISTANCE AVAILABLE TO THIS SEGMENT OF OUR POPULATION.

A MORE DETAILED DESCRIPTION OF SPECIFIC ISSUES WITH REFERENCES TO SECTIONS OF THE ACT AND RECOMMENDATIONS ARE AS FOLLOWS:

1) SECTION 607 - APPROPRIATIONS VERSUS AUTHORIZATION

IN ORDER FOR THE SRF TO BE A PERPETUAL FUND WITH THE CAPABILITY OF PROVIDING MEANINGFUL AMOUNTS OF FINANCIAL ASSISTANCE, IT IS ESSENTIAL THAT THE FULL AMOUNTS OF FUNDS AUTHORIZED BE ACTUALLY APPROPRIATED TO MAKE CAPITALIZATION GRANTS. FULL APPROPRIATIONS ENHANCE THE VIABILITY OF THE FUND IN SEVERAL WAYS. FIRST, IT INCREASES THE OVERALL INITIAL SIZE OF THE FUND. SECOND, IT INCREASES THE AMOUNT OF FUNDS AVAILABLE IN THE 1996 TO 2000 YEAR PERIOD, IMMEDIATELY AFTER THE CAPITALIZATION GRANTS STOP AND BEFORE THE REPAYMENT STREAMS AVAILABLE TO PROVIDE FINANCIAL ASSISTANCE ARE FULLY ESTABLISHED. THIS SECOND CONSIDERATION MAKES FULL APPROPRIATIONS IN THE EARLY YEARS OF CAPITALIZATION PARTICULARLY CRUCIAL. ANOTHER BENEFIT OF FULL APPROPRIATIONS, AND OF KNOWING IN ADVANCE THAT FULL APPROPRIATIONS WILL BE MADE, IS IN PROVIDING BETTER INFORMATION TO THE STATES AND TO LOAN APPLICANTS TO IMPROVE THEIR PLANNING PROCESSES. THE TOTAL FUNDS AUTHORIZED FOR TITLE II AND TITLE VI FOR THE PERIOD 1986 THROUGH 1994 IS

$18 BILLION. WE URGE CONGRESS TO APPROPRIATE THE FULL AMOUNT AUTHORIZED INCLUDING MAKING UP THE SHORTFALL IN FUNDS THAT WOULD HAVE BEEN AVAILABLE FOR THE SRF EITHER IN THE NEXT APPROPRIATION OR BY CONTINUING THE CAPITALIZATION PERIOD BEYOND 1994 AS NECESSARY.

2) SECTION 602(b)(6) - TITLE II GRANT CONDITIONS

THE TITLE II GRANT CONDITIONS AND THE OTHER FEDERAL AUTHORITIES (REFERRED TO AS CROSS CUTTING LEGISLATION) WHICH EPA HAS INCLUDED IN THE SRF INITIAL GUIDANCE IMPACTS THE SRF ADVERSELY IN 4 DIFFERENT WAYS. FIRST, THESE REQUIREMENTS ADD UP TO A YEAR TO THE TOTAL TIME REQUIRED TO PLAN, DESIGN, AND CONSTRUCT A PROJECT. THIS IN TURN SETS BACK THE REPAYMENT STREAM BY UP TO A YEAR, WHICH DETRACTS FROM THE EARLY POST-CAPITALIZATION PERIOD CASH FLOW SITUATION. SECOND, THESE REQUIREMENTS ADD SUBSTANTIALLY TO THE COST OF THE PROJECT (ESTIMATED AT BETWEEN 5% AND 20% OF THE TOTAL PROJECT COST BASED ON THE SIZE OF THE PROJECT) AND TO THE COST OF ADMINISTERING THE PROGRAM, WITH IN MOST CASES, NO TANGIBLE BENEFIT. MANY OF THESE REQUIREMENTS MUST BE SATISFIED IN ORDER TO MAKE A PROJECT ELIGIBLE FOR FUNDING. A SUBSTANTIAL AMOUNT OF MONEY MUST BE SPENT BY EACH CITY IN ORDER TO BE ABLE TO APPLY WHICH IN CONJUNCTION WITH UNCERTAINTY ABOUT AVAILABILITY OF FEDERAL FUNDS, MEANS THAT CITIES MUST EXPEND SUBSTANTIAL FUNDS WITHOUT KNOWING IF

FINANCIAL ASSISTANCE FROM THE SRF WILL BE AVAILABLE. THIRD, LOAN INTEREST RATES MUST BE SET AT A LOWER LEVEL THAN WOULD OTHERWISE BE NECESSARY SIMPLY TO CREATE AN INCENTIVE TO OVERCOME THE NEGATIVE IMPACTS ASSOCIATED WITH THE TITLE II REQUIREMENTS. THIS LOSS OF INTEREST REVENUE DIRECTLY AFFECTS THE SRF CASH FLOW THEREBY REDUCING THE AMOUNT OF ASSISTANCE AVAILABLE FOR SECOND ROUND LOANS. FOURTH, THE TITLE II REQUIREMENTS AND CROSS CUTTING LEGISLATION ARE SIMPLY INAPPROPRIATE IN A LOAN PROGRAM WHERE THE RECIPIENT WILL HAVE TO REPAY THE LOAN. IN ADDITION THERE ARE NO MECHANISMS FOR THE STATES TO DEAL DIRECTLY WITH THE FEDERAL AGENCIES RESPONSIBLE FOR ENFORCING THE CROSS CUTTING LEGISLATION IN A STATE RUN PROGRAM. THESE CONDITIONS SEEM INCONSISTENT WITH THE PHILOSOPHY THAT THE PROGRAM BE "ADMINISTERED AND OPERATED BY THE STATE WITH MINIMAL FEDERAL REQUIREMENTS IMPOSED ON ITS STRUCTURE."

WE RECOMMEND THAT CONGRESS INCLUDE SPECIFIC LANGUAGE IN TITLE VI TO PRECLUDE THE APPLICATION OF ANY OTHER LAWS NOT MENTIONED IN TITLE VI TO THE SRF PROGRAM. WE WOULD ALSO RECOMMEND THAT CONGRESS DELETE SECTION 602(b)(6) ENTIRELY SINCE WE FEEL THAT THERE ARE SUFFICIENT CONTROLS IN SECTIONS 606(b) RELATING TO ANNUAL FEDERAL AUDITS AND 606(e) RELATING TO ANNUAL FEDERAL OVERSIGHT REVIEW TO ENSURE THE INTEGRITY OF THE PROGRAM. AS AN ALTERNATE WE WOULD RECOMMEND DELETION OF THE PHRASE AT THE END OF SECTION 602(b)(6), "IN THE SAME

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MANNER AS TREATMENT WORKS CONSTRUCTED WITH ASSISTANCE UNDER TITLE II OF THE ACT;". THIS WOULD ALLOW THE STATES MORE FLEXIBILITY IN INTERPRETING COMPLIANCE WITH THE REQUIREMENT.

3) SECTION 601(b)(2) - LETTER OF CREDIT

SECTIONS 601(b)(1) AND 602(b)(4) REQUIRE, RESPECTIVELY THAT GRANT PAYMENTS TO THE STATE "SHALL BE MADE AS EXPEDITIOUSLY AS POSSIBLE" AND THAT "ALL FUNDS IN THE FUND WILL BE EXPENDED IN AN EXPEDITIOUS AND TIMELY MANNER" BY THE STATE. THIS IS OBVIOUSLY INTENDED TO ENHANCE THE CAPITALIZATION OF THE FUND AND ESTABLISHMENT OF REPAYMENT STREAMS TO INSURE THE REVOLVING PERPETUAL NATURE OF THE FUND. THE LETTER OF CREDIT OPERATIONS, AS CURRENTLY BEING CONDUCTED, DENY THE STATES' ABILITY TO MAKE MAXIMUM USE OF THE GRANT PAYMENTS. IN ADDITION, THE LETTER OF CREDIT GREATLY INHIBITS A STATE'S OPTION TO LEVERAGE FUNDS FROM CAPITALIZATION GRANTS AND ADDS TO THE ADMINISTRATIVE COSTS OF BOTH THE STATE AND LOAN RECIPIENTS.

WE BELIEVE THAT THE REQUIREMENTS THAT THE STATE "ENTER INTO BINDING COMMITMENTS...WITHIN ONE YEAR AFTER THE RECEIPT OF SUCH GRANT PAYMENT:", AND THE REQUIREMENT THAT "ALL FUNDS IN THE FUND WILL BE EXPENDED IN AN EXPEDITIOUS AND TIMELY MANNER" ENVISIONED THAT THE STATES <u>WOULD</u> BE ALLOWED THE BENEFICIAL USE OF THE FUNDS FOR A REASONABLE PERIOD OF TIME

PRIOR TO ACTUAL INITIATION OF CONSTRUCTION. ALSO, THE STATES ARE REQUIRED TO NEGOTIATE GRANT PAYMENT SCHEDULES BASED UPON THEIR INTENDED USE PLANS, WHICH ARE BASED ON ANTICIPATED LOAN COMMITMENTS, THEREFORE, WE RECOMMEND THAT THE STATES BE ALLOWED TO MAKE CASH DRAWS AT THE TIME WHEN A BINDING COMMITMENT IS MADE, AND BE ALLOWED THE BENEFICIAL USE OF THE MONEY AT THAT TIME.

4) SECTION 603(d)(7) - ADMINISTRATION COSTS

THIS SECTION LIMITS THE TOTAL AMOUNT OF FUNDS WHICH CAN BE USED FOR ADMINISTRATIVE PURPOSES TO 4% OF ALL GRANT AWARDS TO THE FUND. IT DOES NOT ALLOW STATES TO USE ANY PORTION OF THE STATE MATCH OR ANY PORTION OF THE REPAYMENT STREAMS FOR ADMINISTRATIVE PURPOSES. ALSO, THERE ARE NO PROVISIONS FOR PAYING ADMINISTRATIVE EXPENSES AFTER THE 4% OF THE CAPITALIZATION GRANTS ARE EXPENDED. WE BELIEVE 4% OF THE CAPITALIZATION GRANT AMOUNT SHOULD BE ADEQUATE FOR MOST STATES' DURING THE CAPITALIZATION PERIOD PROVIDED THEY ARE NOT SIGNIFICANTLY INCREASING THE SIZE OF THEIR FUNDS BY OVER MATCHING OR LEVERAGING. HOWEVER, AS THE SIZE OF THE STATE SRF'S BEGIN TO INCREASE AFTER CAPITALIZATION IS COMPLETED, AND PARTICULARLY IF STATES ARE OVER MATCHING OR LEVERAGING, THEIR ADMINISTRATIVE COSTS MAY INCREASE. THIS WILL OCCUR AT THE SAME TIME WHEN THE ADMINISTRATIVE RESERVES ARE BEING USED UP. PROVISION SHOULD BE MADE TO FUND

ADMINISTRATIVE COSTS OUT OF THE SRF IN PERPETUITY. SPECIFICALLY, WE SUGGEST THAT THE FEDERAL LAW BE AMENDED TO PROVIDE STATES WITH DISCRETIONARY AUTHORITY AS TO THE AMOUNT OF THE FUND TO BE USED FOR AUTHORIZED ADMINISTRATIVE COSTS.

5) SECTION 603(c)(1) - LAND ELIGIBILITY (SECTION 212)

SECTION 603(C)(1) ALLOWS FUNDING FOR CONSTRUCTION OF TREATMENT WORKS AS DEFINED IN SECTION 212 OF THE ACT. TREATMENT WORKS AS DEFINED IN SECTION 212 DOES NOT ALLOW PURCHASE OF LAND WHICH IS NOT INTEGRAL TO THE TREATMENT PROCESS OR PURCHASE OF EASEMENTS, AND DOES NOT ALLOW FUNDING FOR PURCHASE OF A TREATMENT PLANT SITE. THESE POTENTIALLY MAJOR EXPENSES SHOULD BE ELIGIBLE WHEN NECESSARY TO ALLOW COMPLETION OF A PROJECT SINCE THE APPLICANT IS ONLY BORROWING FUNDS AND WILL ULTIMATELY BE THE OWNER. SINCE SOME ONGOING GRANTS PROJECTS WILL STILL BE SUBJECT TO THE DEFINITION IN SECTION 212, IT WOULD BE BEST TO ADD A NEW DEFINITION OF TREATMENT WORKS IN TITLE VI ALLOWING PURCHASE OF LAND AND EASEMENTS.

6) SECTION 606(b,c,d & e) - EPA OVERSIGHT

THE STATES HAVE TOTAL RESPONSIBILITY FOR OPERATION OF THE SRF PROGRAM AND ASSURING THE INTEGRITY OF THE SRF, THEREFORE, EPA OVERSIGHT SHOULD BE MINIMAL DURING

CAPITALIZATION OF THE SRF AND COMPLETELY ENDED AFTER THIS PERIOD. WE RECOMMEND THAT SECTIONS 606(b,c,d & e) BE AMENDED BY CONGRESS TO MAKE THESE SECTIONS APPLICABLE ONLY DURING THE SRF CAPITALIZATION PERIOD. EPA SHOULD NOT OVERSIGHT THE SRF IN PERPETUITY THROUGH ANNUAL AUDITS, REVIEW OF INTENDED USE PLANS, ANNUAL REPORTS AND OVERSIGHT REVIEWS. AFTER THE CAPITALIZATION PERIOD, OVERSIGHT OF THE SRF SHOULD BE SOLELY A STATE FUNCTION.

CHEMICAL
MANUFACTURERS
ASSOCIATION

WRITTEN STATEMENT

OF THE

CHEMICAL MANUFACTURERS ASSOCIATION

BEFORE THE

SUBCOMMITTEE ON ENVIRONMENTAL PROTECTION

OF THE

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

UNITED STATES SENATE

REGARDING

IMPLEMENTATION OF

THE WATER QUALITY ACT OF 1987

JULY 14, 1989

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EXECUTIVE SUMMARY

The Chemical Manufacturers Association (CMA) has worked with the Environmental Protection Agency (EPA) since passage of the Water Quality Act of 1987 (WQA) to help develop regulations to implement the Act. CMA commends the Agency for its efforts to develop these regulations. CMA has concerns, however, about a number of issues, including:

- o sewage sludge standards;
- o post-best available technology (post-BAT) requirements under section 304(1) of the Clean Water Act (CWA); and
- o non-point source pollution.

Sewage Sludge. Many of EPA's proposed sludge standards are not based on good science. There are significant flaws in a number of the assumptions, models, and data bases used in the risk and exposure assessments. These flaws have led to serious flaws in the proposed standards. As proposed these standards could hinder the beneficial uses of sludge and lead to increased sludge disposal or incineration.

CMA is also concerned about the affect of this proposal on the availability of removal credits. While EPA has proposed sludge standards for pollutants that may present a risk to public health and

the environment, the Agency has failed to address the pollutants for which its own data show there is little or no risk. If unchanged, this approach will result in the unavailability of removal credits for those pollutants that present little or no risk and will lead to wasteful, redundant treatment by industry and publicly owned treatment works.

Congress should continue to oversee EPA's efforts in this area. At a minimum, Congress may want to consider asking the Agency for a report on the problems encountered in the sludge proposal. Since some of these problems may have been caused by the time deadlines in the WQA, Congress should also consider extending these deadlines.

Section 304(1). CMA fully supports the basic goals of CWA section 304(1): to reduce the discharge of toxic pollutants into the nation's waters and to improve the quality of the waters so as to protect public health and the environment. However, there are four basic problems with section 304(1) and the final regulations EPA recently promulgated.

First, section 304(1) is being implemented prematurely. For many industries, effluent limitations guidelines are just now being implemented or have not yet even been promulgated. Until these guidelines become effective, it is difficult to know with any certainty what additional requirements, if any, beyond BAT are necessary to control toxics.

Second, the deadlines are overly ambitious. These deadlines have led to a program based on limited data, limited public input, and confusion in the regulated community and among the regulatory agencies. Further, these deadlines have forced EPA to hurriedly administer the program through guidance instead of rulemaking.

Third, the section 304(1) rulemaking will, if left unchanged, infringe on the fundamental authority of the states to establish water quality standards.

Fourth, the rulemaking has shifted the statutory focus on both point and non-point sources of pollution too far towards the more traditional point source orientation.

In light of these problems, Congress should continue to oversee EPA's 304(1) program. Appropriate revisions to address these problems should also be seriously considered.

Non-Point Source Pollution. Pollution control by industry over the past two decades has resulted in major improvements in water quality. Further significant progress in improving water quality can be made only if Congress and EPA give increased attention to non-point source pollution. To this end, CMA urges the Congress to provide adequate funding for the CWA section 319 non-point source management program.

I. INTRODUCTION

The Chemical Manufacturers Association (CMA) is pleased to submit this written statement on the Environmental Protection Agency's (EPA's) implementation of the Water Quality Act of 1987 (WQA). CMA is a nonprofit trade association whose member companies represent more than 90 percent of the productive capacity of basic industrial chemicals in the United States. CMA's members are directly and significantly affected by the requirements of the WQA and EPA's implementing rules and guidance.

CMA and many of its member companies were actively involved in the Clean Water Act (CWA) reauthorization leading up to Congress' passage of the WQA in February 1987. Since passage of the WQA, CMA has worked with the Environmental Protection Agency (EPA) through public comments and meetings to help develop regulations to implement the Act. Further, CMA has recently developed a voluntary industry-wide program to reduce the releases of pollutants to all environmental media, including surface waters.

Since passage of the WQA, it has been clear that EPA is committed to implementing the 1987 amendments. CMA is well aware of the strict deadlines and ambitious goals that the 100th Congress set for the Agency as well as the limited resources and complex issues the Agency has had to deal with. In light of all this, we commend EPA and the Office of Water for their efforts to respond to Congress' directives. In the last six months alone, EPA has published three final rules

(1) codifying parts of the WQA, (2) establishing the post-best available technology (post-BAT) program under section 304(1) of the CWA, and (3) establishing a sewage sludge permit program. The Agency also proposed three rules addressing sewage sludge standards, storm-water, and pretreatment. In addition, EPA is expected to propose new anti-backsliding requirements in the near future. Prior to 1989, EPA's rulemaking activities were highlighted for the chemical industry by the promulgation in November 1987 of effluent limitations guidelines for organic chemicals, plastics, and synthetic fibers (OCPSF) facilities.[1]

In light of this regulatory activity and the fact that EPA is now at mid-course in implementing the WQA, it is appropriate that the Senate review EPA's efforts at this time. The CMA comments that follow will focus on the issues of sewage sludge, toxics control under section 304(1), and non-point source pollution, which the Subcommittee on Environmental Protection identified as the major topics for the oversight hearing that it held June 16, 1989.

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[1] 40 C.F.R. Part 414 (1988).

II. SEWAGE SLUDGE

With passage of the WQA in 1987, Congress amended existing section 405(d) of the CWA, which requires EPA to develop guidelines for the use and disposal of sewage sludge from treatment works. The 1987 amendments direct EPA to identify the toxic pollutants in sewage sludge that might adversely affect public health or the environment and specify management practices and numerical limits for each of the pollutants. In order to implement the sludge standards, the amendments also require EPA to promulgate regulations revising the National Pollutant Discharge Elimination System (NPDES) permit program under section 402 of the CWA.[2]

In February 1989, EPA proposed standards and management practices for the use and disposal of sludge from publicly owned treatment works (POTWs) (as well as from privately owned treatment works).[3] CMA is interested in this proposal for two reasons. First, many CMA member companies discharge to POTWs and may be required to meet more stringent local pretreatment limits once the sludge standards become effective. Second, until the sludge standards do become effective, removal credits cannot be issued under section 307(b)(1) of the CWA. Thus, CMA is

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[2]Clean Water Act, §405(d)(2)-(g), 33 U.S.C.A. §1345(d)(2)-(g) (West Supp. 1989).

[3]54 Fed. Reg. 5746 (1989). In addition, EPA promulgated regulations establishing a national sludge permit program in May 1989. See 54 Fed. Reg. 18716 (1989).

currently reviewing the February proposal and intends to submit comments to the Agency by August 1989.

Based on our initial review of this rulemaking, several preliminary comments can be made. First and foremost, this proposal raises the basic issue of good science in environmental regulation. Clearly, no one would disagree that our environmental laws should and must be based on assumptions, models, and data that are supported by good science. However, this principle often breaks down in individual rulemakings. When this happens, flawed or inappropriate regulations can result and environmental improvements that were sought to be achieved are often delayed. Part of this problem is due to inadequate Agency resources and unrealistic deadlines that are in many of the environmental statutes, including the Clean Water Act.[4]

In the sludge rulemaking, there are serious flaws in many of the basic assumptions, models, and data bases EPA uses in the risk and exposure assessments. These flaws have led to serious flaws in the proposed standards and management practices. While CMA agrees with the

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[4]An example of these unrealistic deadlines is found in the sludge requirements added by the 1987 amendments. In the amendments, Congress directed EPA to propose sludge standards by November 30, 1986 (more than 2 months before passage of the WQA) and to finalize the standards by August 31, 1987 (only nine months after the proposal and only seven months after passage of the WQA). Congress also required that EPA propose a second set of sludge standards by July 31, 1987, with promulgation required by June 15, 1988. See Clean Water Act, §405(d)(2), 33 U.S.C.A. §1345(d)(2) (West Supp. 1989). Clearly, even though we are already more than a year beyond the last statutory deadline, EPA has thus far issued only the initial sludge proposal.

Agency's objective that the sludge standards be stringent enough to ensure protection of human health and the environment, we are troubled by the number of mistakes and/or unrealistic assumptions in this proposal.[5] Moreover, these standards as proposed could significantly impede the beneficial uses of sludge, e.g., fertilizer, that EPA and the Congress have sought to encourage and could lead to significant increases in sludge disposal or incineration.

This rulemaking, for example, uses unrealistic assumptions in the exposure assessment for the proposed incinerator standards. As part of that assessment, EPA examined the affect on human health of vapor inhalation from a sewage sludge incinerator. EPA used models that calculate the health risks to a so-called "Most Exposed Individual" (MEI). In EPA's calculations, the MEI is assumed to spend every hour of every day of its 70-year life at the exact same location (the location of the maximum annual pollutant concentration), inhaling all the ash being emitted by an incinerator that operates 24 hours a day.

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[5] In 1985-1986, EPA's Science Advisory Board (SAB) reviewed the Agency's risk assessment methodologies for landfills, land application/distribution and marketing, incineration, and ocean disposal and published its report on this review in 1987. Among its conclusions, the SAB stated: "For the purpose of generating supposed 'real worst case' estimates, many subjective and conservative assumptions are made. When combined, they produce multiplicative conservatism which can become unrealistic. In addition, this technique produces inconsistent degrees of conservatism between management practices. As currently implemented, the reasonable worst case concept is misleading and inconsistent." SAB, Review of Technical Documents Supporting Proposed Revisions to EPA Regulations for the Disposal/Reuse of Sewage Sludge Under Section 405(d) of the Clean Water Act, at 2 (January 1987).

365 days a year.[6] To determine the overall health risks associated with inhaling these incinerator vapors, EPA assumed a total population of 513 million people (more than twice the current population of the entire United States) would be exposed to the 180 sludge incinerators currently in operation.[7] Similarly, in the exposure assessment for the proposed monofill, i.e., a sludge landfill, EPA assumed that the MEI lives at the property line of the monofill, residing there every hour of every day for 70 years. In addition, the worst case wind speed and atmospheric stability conditions are assumed to prevail 24 hours a day, 365 days a year for 70 years.[8] In short, EPA has proposed an unrealistic regulation that is not based on good science or real world conditions.

CMA is also concerned about the affect the proposal will have on the availability of removal credits.[9] In particular, the Agency has

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[6] EPA, Incineration of Sewage Sludge Technical Support Document, at 5-6 to 5-8 (1988).

[7] EPA, Human Health Risk Assessment for Municipal Sludge Disposal; Benefits of Alternative Regulatory Options, at 7-23, Table 7-H (February 1989). In a footnote to this table, EPA has acknowledged that this risk assessment is inaccurate and must be corrected before being finalized.

[8] EPA, Landfilling of Sewage Sludge Technical Support Document, at 2-20 to 2-23 (1989).

[9] As the Congress is aware, section 307(b)(1) of the CWA provides that industrial users can be given removal credits in order to minimize the redundant treatment that often occurs when wastewaters are first treated by industrial users and then again by a POTW. In accordance with an opinion of the Third Circuit Court of Appeals, however, these removal credits cannot be received until EPA promulgates sludge
(Footnote Continued)

proposed sludge standards for those pollutants where data indicate there may be a risk to public health or the environment. The Agency has failed, however, to also address the pollutants for which its own data show there are no risks.[10] As a result, this proposal, if finalized, will not allow removal credits for those pollutants that have been assessed by EPA as having little or no risk. This, in turn, will lead to the wasteful, redundant treatment by POTWs and industry that Congress sought to eliminate when it allowed POTWs to grant removal credits.

In conclusion, Congress should continue to oversee EPA's efforts in this area. At a minimum, Congress may want to consider asking the Agency for a report on the problems encountered in the sludge proposal. Since some of these problems may have been caused by the time deadlines in the WQA, Congress should also seriously consider extending these deadlines.

(Footnote Continued)
standards for the pollutant or pollutants in question. Natural Resources Defense Council, Inc. v. EPA, 790 F. 2d 289 (3d Cir. 1986).

[10] See, e.g., EPA, Record of Proceedings on the OWRS Municipal Sewage Sludge Committees in Washington, D.C. (1988) (Reference No. 80 in the public record of the proposed sludge rule).

III. SECTION 304(l)

In addition to addressing the problem of sewage sludge in the 1987 amendments, Congress also added new section 304(l) to the Clean Water Act.[11] This section addresses Congress' continuing concerns about toxic pollution. CMA fully supports the basic goals of section 304(l): to reduce the discharge of toxic pollutants into the nation's waters and to improve the quality of the waters so as to protect public health and the environment. As with the sludge rulemaking, however, there are some basic problems with section 304(l) and the final regulations EPA recently promulgated.[12]

CMA continues to be concerned about the premature implementation of section 304(l). We understand Congress' desire to "get on" with the clean up of America's waters. As we stated during the reauthorization hearings, however, determinations about what additional controls beyond BAT, if any, are necessary to meet water quality standards can only be made with any certainty after installation of the BAT technology. For

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[11] As the Congress is aware, section 304(l) provides that by Feburary 4 of this year, states were to have submitted to EPA a list of waters ("the short list") that are not expected to meet water quality standards due entirely or substantially to point source discharges of the 126 priority pollutants. For the identified point sources, the states were also to have submitted to EPA "individual control strategies" (ICS's) that will assure attainment of the water quality standards by June 1992. In its rulemaking, EPA has defined the term "individual control strategies" to mean an NPDES permit. 54. Fed. Reg. 23868, 23896 (1989) (to be codified at 40 C.F.R. §123.46 (c)).

[12] 54 Fed. Reg. 23868 (1989).

example, the OCPSF effluent limitations guidelines are just now being implemented. In addition, EPA has not yet reproposed the pesticides guidelines that were voluntarily remanded during litigation. Moreover, the industries EPA identified in the Domestic Sewage Study as needing effluent limitations guidelines still do not have guidelines.[13] In short, we believe that the 304(1) designation of many facilities would have been unnecessary if the implementation of 304(1) had been properly sequenced.

A related problem involves the unrealistic deadlines in section 304(1). Although well intentioned, these so-called "ambitious" deadlines have hindered the development of an appropriate post-BAT program. In the first place, some of the deadlines set forth in section 304(1) have been missed despite the commendable efforts of EPA and the states. For example, EPA's final 304(1) guidance was issued four months late. In addition, the Agency's regulations implementing section 304(1) were published just this month, four months after the states' deadline for submittal of their lists of impaired waters and individual control strategies (ICS's) and only days before EPA's deadline for approval of these submissions.

These unrealistic deadlines have led to a post-BAT program based on extremely limited data, limited public input, and confusion in both the regulated community and among the regulatory agencies. One of the

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[13] See 51 Fed. Reg. 30166, 30172 (1986).

most disturbing aspects of this process is that EPA has been forced to hurriedly administer one of its most important water pollution programs through guidance instead of rulemaking (as evidenced by the fact that final regulations were not promulgated until just several weeks ago). While the public has had some opportunity to comment on this guidance, in the end, guidance is just that and nothing more; it falls outside the normal rulemaking and judicial review procedures.

In addition to the above problems, the final 304(1) rulemaking could, if left unchanged, fundamentally alter the way in which water quality standards are established under the CWA. Traditionally, the development of water quality standards has been the primary responsibility of the states, subject to oversight by EPA. We are concerned that the new 304(1) rulemaking has infringed on state authority in this area. For example, in certain cases the regulations require the states to use the Agency's national water quality criteria when assessing whether narrative water quality standards have been violated.[14] Further, this requirement again raises the question of the role of guidance documents in the regulatory process since EPA criteria are only guidance.

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[14] 54 Fed. Reg. 23868, 23897 (1989) (to be codified at 40 C.F.R. §130.10(d)(4)).

IV. NON-POINT SOURCE POLLUTION

The last subject we have been asked to comment on, non-point source pollution, also leads to a final concern about section 304(1). During the CWA reauthorization, CMA supported Congress' efforts to address the problem of non-point source pollution. We were encouraged by the passage of the new non-point source management program in CWA section 319. Also indicative of Congress' new focus on non-point source pollution was its requirement in section 304(1) that the states submit to EPA a comprehensive list of waters, known as the "long list," that are impaired by either point or non-point sources of pollution. Further, with respect to the list of impaired waters known as the "short list," Congress directed that the states submit to EPA only a list of waters that are impaired due entirely or substantially to point source discharges along with ICS's for the identified point sources. Where non-point sources are the primary reason for the impairment, in other words, ICS's were not to be required for the point sources that happen to be on the waterbody.

In contrast with this limited focus on point sources, however, EPA's 304(1) regulations have shifted the focus back towards the more traditional point source orientation. In particular, EPA's new regulations require that ICS's be prepared for all point sources where any additional water quality-based requirements will result in the attainment of the applicable water quality standards (even where the

impairment is due substantially to non-point sources).[15] This means that whenever a point source discharge amounts to some percentage, however small, of the pollutant loadings leading to impairment, the state must consider the impairment to be entirely or substantially the result of this discharge. This is inconsistent with the plain meaning and intent of section 304(1).

Pollution control by industry over the past two decades has resulted in major improvements in water quality. In contrast, significant sources of non-point source pollution have not yet been effectively addressed.[16] As a result, further significant progress in improving water quality can be made only if Congress and EPA give increased attention to non-point source pollution.

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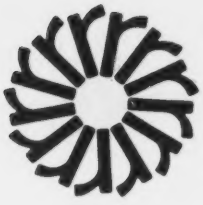
[15] Id. (to be codified at 40 C.F.R. §130.10(d)(5)(i)).

[16] This is reflected in EPA's recently released section 304(1) data which indicate that a vast majority of the more than 17,000 streams segments impaired in this country are in fact impaired becasue of non-point source pollution. See EPA, 304(1) Program Summary (June 12, 1989) (distributed at June 13, 1989 press conference held at EPA Headquarters in Washington, D.C.).

V. CONCLUSION

CMA applauds the Subcommittee's mid-course review of EPA's efforts to implement the Water Quality Act of 1987. Continued Subcommittee oversight is especially important with respect to the proposed sludge rule and the section 304(l) post-BAT program (which EPA has proposed to make a biennial program). CMA recommends that Congress consider extending the sludge deadlines in the CWA in order to give EPA time to repropose the rule with the necessary corrections. Congress should also consider revising the 304(l) program to address the problems discussed in this statement. With respect to non-point source pollution, CMA urges Congress to provide EPA and the states with adequate funding to implement the section 319 non-point source management program. Finally, as we all prepare for reauthorization of the Clean Water Act in 1991-92, one of the important things to be learned from implementation of the WQA is the need for realistic time frames and adequate funding.



National Association of Regional Councils

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TESTIMONY OF

THE NATIONAL ASSOCIATION OF REGIONAL COUNCILS

BEFORE THE
ENVIRONMENTAL PROTECTION SUBCOMMITTEE
OF THE
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

UNITED STATES SENATE

June 16, 1989
Washington. D.C.

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Brenham, Texas

First Vice President
JOHN A. F. MELTON
Los Angeles, California

Second Vice President
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The National Association of Regional Councils represents a majority of the Nation's 530 substate regionals associations of government. Regional councils of government, which in some areas are called regional planning commissions, local development districts or associations of government, are agencies of local government under the direction of city and county elected officials. They fill a gap in our intergovernmental structure by dealing with problems, such as water quality, that transcend jurisdictional boundaries and must be addressed on a regional basis.

The basic responsibility of a regional council is to be an umbrella agency that facilitates regional coordination and management activities. Many regional councils also arrange for the implementation of regional policies. Regional councils also allow rural local governments to more efficiently coordinate and deliver programs vital to rural areas.

In addition, many of the 530 regional councils are designated areawide water quality management planning agencies. These councils provide an important linkage between local governments and the states by performing planning, coordination, and public information activities leading to implementation of programs and policies to control the sources of water pollution and attain national water quality standards. It is this linkage that assures the direct involvement of local governments which are ultimately responsible for implementation of policies and regulations to control the sources of water pollution.

In 1981 Congress strengthened its commitment to areawide water quality management planning when it mandated a one percent set aside from wastewater con-

struction grants for water quality management planning. Congress explicitly directed the states to give funding priority to designated public comprehensive planning organizations Congress. In the most recent amendments to the Water Quality Act, Congress reaffirmed its commitment to areawide water quality management planning with a requirement that the states pass through at least forty percent of water quality management planning funds to areawide agencies.

Moreover, Congress wisely ensured that as the national program transitioned from a grants assistance program for wastewater treatment facility construction to a revolving loan program, the states would continue to comply with planning and regulatory requirements in the Federal Water Pollution Control Act as a prerequisite for the use of such funds. We strongly endorse that view, particularly with regard to assuring consistency with 208 areawide and state basin plans.

Following are examples of the kinds of water quality management planning activities being undertaken by regional councils with the support of federal funds. These are the kinds of activities that are being undertaken with minimal federal investment but which have a large pay-off in terms of contributing to meeting the goals of the Federal Water Pollution Control Act. In many instances, regional councils have leveraged these funds to obtain substantial local and state funding beyond what is required to match the federal funds.

The Metropolitan Washington Council of Governments (MWCOG), Washington, D.C., was an early participant in water quality management planning funded under section 205(j) of the Water Quality Act. The planning and research activities funded under "205(j)" have provided the technical foundation for

MWCOG's current water quality program which is now focused on implementation of water quality controls and ongoing monitoring to identify water quality trends and evaluate performance. While MWCOG's current program is supported for the most part with local funds, the current level of technical sophistication would not have been possible without the initial federal support under the 205(j) water quality management planning program.

An example of MWCOG's current activities is a project to restore the highly urbanized Anacostia watershed. This project builds upon MWCOG's successful program for controlling urban runoff. In 1988 state and local agencies signed a formal interjurisdictional agreement to comprehensively address the problems of the Anacostia watershed and to restore it to a clean, healthy, regional resource. MWCOG is providing the administrative and technical support for this effort. Under the agreement, the signatories will (1) earmark funds for the development and implementation of initiatives stated in restoration workplans; (2) implement local and regional programs and projects; and (3) annually evaluate and report the progress of the restoration effort.

During the first year much work was accomplished toward restoration of the watershed including an intensive baseline analysis of water quality conditions to provide a snapshot of the problems; the development of a mathematical model of the tidal Anacostia; the design, construction and implementation of a number of water quality control projects, most notably the construction of the infrastructure for a program to minimize combined sewer overflow; inventories to identify potential retrofit projects within the watershed; and an increase in the number and efficiency of sediment and urban runoff controls in the basin.

The Northern Virginia Planning District Commission (NVPDC), Annandale, Virginia, routinely performs technical reviews of urban Best Management Practice (BMP) plans during the design phase of development. In 1987, NVPDC conducted for jurisdictions within the Occoquon River Basin an analysis of regional BMPs looking at cost-effectiveness and developing siting and design criteria. This information provided local jurisdictions with the planning tools necessary to implement regional BMPs. Using local-only funding, NVPDC has also prepared a BMP handbook for the Occuoquon Watershed. The handbook contains detailed information on each type of BMP including step-by-step design procedures, factors to consider when designing a BMP facility, examples of existing facilities in the area, and detailed design aids. In addition, to improve practical design guidelines for use by engineers designing BMPs, NVPDC recently conducted a laboratory investigation of three areas associated with BMP performance to be able to better quantify expected pollutant removal rates.

The Northeast Ohio Areawide Coordinating Agency (NOACCA), Cleveland, Ohio, recently initiated a project to provide for increased implementation of nonpoint source pollution controls on land draining into a major lake within the region. The project involves the inventorying of ground conditions to enable the design and implementation of remedial measures, and the demonstration of an efficient and cost-effective process by which control needs can be quantified. NOACA recently undertook three projects to assist local communities in defining their groundwater management needs and to develop recommended programs to meet those needs. The projects included the development of a unified environmental data base management system, technical assistance in the development of a local groundwater management plan, and the development of a plan for enhanced public participation in local groundwa-

ter management programs. HGAC's plans to launch similar efforts in watersheds throughout the five-county planning area.

In 1988, the Houston-Galveston Area Council (HGAC), Houston, Texas used 205(j) funding to support its participation with the Texas Water Commission in the preparation of the State Nonpoint Source Assessment and Management Reports. Under this project, HGAC identified and evaluated watersheds with potential nonpoint source-related water quality problems; identified activities and land uses that would generate nonpoint source pollution; identified specific pollutants known or suspected to contribute to water quality problems; and identified BMPs to control nonpoint source pollution and which were in place throughout the region. HGAC also developed recommendations for the control of nonpoint source pollution throughout the region, and recommended a framework for establishing watershed task forces to address nonpoint source pollution. Over the next year, HGAC will hold workshops on BMPs to develop model guidelines for use in any of its watersheds.

Federal 205(j) funding also supports HGAC's ongoing work in wasteload projections which is used by the state in water quality monitoring as well as by HGAC in their involvement in the Galveston Bay National Estuary Program and the Wellhead Protection Program.

The Southeastern Michigan Council of Governments (SEMCOG), Detroit, Michigan, using 205(j) funds prepared a remedial action plan for the Rouge River, one of the most polluted in the country. In preparing the plan, SEMCOG used advisory committees made up of the local units of government and other decisionmakers with a stake in the clean-up of the river. Because of the involvement of the local communities in the planning process, SEMCOG was

able to gain the endorsement of the communities in the river basin and the endorsement of the Michigan Department of Natural Resources on a very highly controversial and expensive plan. The plan is now being utilized as the basis for NPDES permits aimed at implementing clean-up activities.

The Piedmont Triad Council of Governments (PTCOG), Greensboro, North Carolina, with the support of federal 205(j) funding has been actively involved in nonpoint source pollution control. During the past year, three activities are of particular note:

- PTCOG conducted indepth field surveys of all point and nonpoint sources in the watershed area encompassed by the council. Detailed inventories and maps were prepared for use by the council and local jurisdictions.

- PTCOG was able to secure the support of all local governments located in the watershed to enact watershed protection ordinances.

- PTCOG developed a model watershed protection ordinance for use by the local jurisdictions with urban and rural BMP guidelines for control of runoff, sedimentation, contamination and stormwater.

These are but a few examples of ways in which regional council water quality management planning programs and activities can make a valuable contribution toward preserving and enhancing the quality of our nation's water resources. We believe these kinds of activities need to be fostered and the role of regional councils preserved.

Some states are, in fact, fulfilling the statutory requirement for updating and maintaining 208 areawide water quality management plans plans and are complying with the mandatory pass through to regional councils of water quality management planning funds. In these cases, the states are taking full advantage of the potential contributions, such as those illustrated above, that regional councils can make. Nevertheless, we know that in most cases states are ignoring these requirements. Unfortunately, the Environmental Protection is not adequately monitoring state compliance with these planning and pass through requirements. Therefore, we have no way of knowing whether the states are diverting 205(j) planning funds without a finding, in consultation with local governments, that there are no activities that regional councils can undertake that would contribute to meeting the goals of the Act.

We strongly urge this Committee, in its oversight function, require the Environmental Protection Agency to fulfills it responsibility enforcing state compliance with requirements of the Act that call for a mandatory pass through of water quality management planning funds and for consistency with 208 areawide water quality management plans. This is of particular concern because we are at a vital juncture: states soon will be fully administering the EPA-supported Revolving Loan Program which also carries with it the requirements for consistency with 208 areawide water quality management plans and pass through of planning funds.

NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS

OFFICE OF THE EXECUTIVE DIRECTOR

July 7, 1989

The Honorable Max Baucus
Chairman
Subcommittee on Environmental Protection
Committee on Environment and Public Works
U.S. Senate
Washington, D.C. 20510-6175

Dear Senator Baucus:

The National Society of Professional Engineers is pleased to respond to your invitation for written comments on implementation of the Water Quality Act of 1987. Our comments will focus on the letter of credit system utilized under the U.S. Environmental Protection Agency's State Revolving Loan Fund (SRF) program.

NSPE participated in the initial modeling effort and provided some of the first testimony on the SRF concept. However, since that time, effective implementation of the program has been seriously undermined by the letter of credit (LOC) process. The Environmental Protection Agency maintains that the LOC process has fulfilled its purpose (as they define it); to decelerate the federal outlays to the states through the first five years of the program by making cash payments only when construction costs have been incurred. The LOC process fulfills an EPA goal of the Act to make payment available within two years of each capitalization grant. It does so, however, without regard to the environmental effects that result from delayed completion of environmental projects.

All of the modeling and support of the SRF concept that NSPE has provided through its testimony in previous years was based on the assumption that cash would be provided to the states who could then leverage the funds. A very critical element of the mechanism would allow the SRF's to use earnings to leverage those funds into construction projects with a total value greater than the Federal contribution. There is no getting around it, LOCs delay capitalization of SRFs, increase the administrative costs and minimize the options available to the states. This reduces (or obviates totally) leveraging of the SRF as needed to meet priority needs. The bottom line is that the amount of construction contracts that can be funded is substantially smaller than the sum of the LOC's. (This is leveraging with a coefficient of less than one!) The concept that received support (providing cash to states) would have allowed the sum of the construction contracts to equal somewhere between two and five times the federal funding, depending on the assumptions one makes with regard to interest rates at the time. Although this concept is understood fully by those who administer the program, the realities of the situation are ignored in light of their bigger concern -- that of reducing federal outlays.

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It is important to point out that SRF's are being or will be implemented in the majority of the states because the LOC process is "the only game in town." It is not because it is superior to the alternative of cash payments which was originally proposed -- and which was the basis for the support for moving from a grant-based federal funding program to a loan-based federal funding program. In effect the intent of the original Act has been seriously thwarted by the change in implementation that the LOC process represents.

More general points we would make regarding the SRF program relate to its funding and administration. Our funding concern echoes that of many other members of the "infrastructure community" regarding the lack of adequate funding -- and even cuts -- at the same time that federal environmental regulations and compliance penalties are increasing. In short, the federal government is requiring more in the way of compliance and doing so while providing decreased funding. Certainly we recognize the current federal budgetary constraints. However, I would ask you to recall that an original goal of the SRF program was ostensibly to shift more of the responsibility for clean water onto the states from the federal government. A movement from construction grants to state revolving loan funds was sold as a reduction of the bureaucracy and paperwork. This has not been the result. The SRF program has not improved the problem of costly delays in construction caused by paperwork and administrative requirements of agencies both at the state and federal level. In many ways it has, in fact, increased delays.

In summary, it is a tragic case of "losing something" between the design and the construction phases. The program was designed in such a way that it fulfilled a real need, but the actual "construction" or implementation of the process fell far short of satisfying those needs.

The National Society of Professional Engineers would very much like to be a part of efforts to improve the letter of credit process, whether they originate with EPA or the Congress. It is a process in need of significant refinement. As the process now operates, critical environmental projects are experiencing significant, and in some case crippling, delays. We look forward to participating in developing a solution.

With best regards,

Donald G. Weihert

Donald G. Weihert, P.E.
Executive Director